



REALTY SERVICES, INC.

Via: USPS Priority Mail

12/23/2015

Ms. Susan Sloper
Community Planner
City of Fitchburg
5520 Lacy Road
Fitchburg, WI 53711

Re: Building Permit Application/Class 2 Collocation for the placement of additional equipment to an existing Verizon Wireless Mobile Service Facility/Irish Lane-5282 Irish Ln. Fitchburg, WI 53711

Parcel ID #: 225/0609-154-9501-2

Ms. Sloper:

Pursuant to your 12/02/2015 email, attached please find the City of Fitchburg Planning/Zoning Department Architectural & Design Review Application for the placement of an emergency power backup generator to an existing Verizon Wireless Mobile Service Facility at the above address.

On behalf of our client Verizon Wireless, enclosed please find the following information:

1. Completed and signed City of Fitchburg Architectural & Design Review Application;
2. Additional copies of previously submitted Verizon Wireless construction drawings, site plans, elevations, and equipment details in both hard copy and soft copy format.

Once complete, please send all permits to me at the address listed below.

Best regards,

Nathan Haupt
Ton 80 Realty Service, Inc.
On behalf of Verizon Wireless

Enclosures as described

RECEIVED
11/4/2016



City of Fitchburg
Planning/Zoning Department
5520 Lacy Road
Fitchburg, WI 53711
(608-270-4200)

ARCHITECTURAL & DESIGN REVIEW APPLICATION

Applicant/Contact Person: Nathan Haupt, on behalf of Verizon Wireless

Address: POB 578790

Phone Number of Contact Person: 775-223-3828

City, State, Zip Code: Chicago, IL 60657

Email of Contact Person: nhaupt@ton80realtyservices.com

Project Address: 5370-5376 Irish Ln. Fitchburg, WI 53711

Lot: Lot 2 CSM 9896 Subdivision: _____

Project Type: _____ Multi-Family _____ Commercial _____ Industrial _____ Mobile Service Facility _____ Other
_____ New ☒ Addition

Impervious Surface Ratio (ISR): 2.2% (City Standard: maximum 65% ISR)
40 SF within 1797 SF existing equipment compound.

All items listed below must be included with the application to be considered complete. If an item is not included with the application, the applicant must provide in writing the basis for not including it. Building and site plans submitted to the Fitchburg Plan Commission for architectural and design review shall contain the following information:

Site Data:

- ☒ 1. Lot or property dimensions.
- ☒ 2. Orientation (to north).
- ☒ 3. Adjacent highways, roads, drive, etc.
- ☐ 4. Existing natural features (rivers, ponds, wetlands).
- ☒ 5. Existing buildings and/or improvements.
- ☐ 6. Existing and proposed site drainage.
- ☐ 7. Utility plans, including main/lateral sizes and existing fire hydrants on site or within 300 feet of the site
- ☒ 8. ISR shall be indicated on all plans.
- ☐ 9. Stormwater management plans and details.
- ☐ 10. Lighting plan in footcandles and light fixture cut sheets.

Building: N/A. No building proposed.

- ☐ 1. ~~Building size, configuration and orientation.~~
- ☐ 2. Distance from lot lines.
- ☐ 3. Distance from other buildings, improvements and natural features.
- ☐ 4. Location of well, septic tank, drainfield, etc. (if applicable)
- ☐ 5. Additional proposed additions or new structures
- ☐ 6. Construction type (wood frame, structural steel, etc.).
- ☐ 7. Foundation type (full basement, slab on grade, etc.).
- ☐ 8. Number of levels.
- ☐ 9. Siding/exterior covering type, color, texture, etc.
- ☐ 10. Roof type (gable, hip, shed, flat, etc.) and pitch.
- ☐ 11. Roofing material type, color, texture, etc.
- ☐ 12. Exterior door and window location, size, type, etc.
- ☐ 13. ~~Fire protection sprinklers or fire alarm systems.~~

Ingress, Egress, Parking: N/A. No changes proposed to the existing ingress, egress, or parking.

- ☐ 1. ~~Location of highway and road access points.~~
- ☐ 2. Location, size, configuration of drivers and walks.
- ☐ 3. Number, size, location of parking spaces.
- ☐ 4. Location of handicapped parking and accessible building entrances.
- ☐ 5. ~~Bicycle rack(s).~~

ARCHITECTURAL AND DESIGN REVIEW APPLICATION

Page 2

Landscaping:

N/A. No change to proposed to the existing landscaping.

☐
☐
☐
☐

- ~~1. Location, species, size of existing trees, shrubs, and plantings.~~
- ~~2. Location, species, size of proposed plantings.~~
- ~~3. Location and size of all paved, seeded/sodded and gravelled areas.~~
- ~~4. Location of all retaining walls, fences, berms and other landscape features.~~

***It is highly recommended that an applicant hold at least one neighborhood meeting prior to submitting an ADR application to identify any concerns or issues of surrounding residents.**

The preceding information is considered to be the minimum information for submission, and the City may require additional information for its review. Any interpretations provided by city officials as the result of submitting the attached information are based on the submitted plans, and any plan changes, may affect the interpretations.

It is the responsibility of the owner/applicant to insure compliance with all local and state requirements. The below signed applicant acknowledges the above information and hereby submits the attached information for the City's Architectural and Design Review Process.

Signed: _____

Applicant or Authorized Agent

Date: 12/23/2015

***** Application shall be accompanied by one (1) sets of full-size plans, two (2) sets no larger than 11"x17", and one (1) pdf document of the complete submittal to planning@fitchburgwi.gov. Applications are due at least 4 weeks prior to the desired Plan Commission Meeting. The time frame assumes a complete set of plans is provided, and if it is not provided the Plan Commission date will be adjusted.**

FOR CITY USE ONLY

Date Received: _____ Plan Commission Date: _____

Comments:

LESSOR/ LICENSOR APPROVAL

SIGNATURE	PRINTED NAME	DATE

LESSOR/ LICENSOR: PLEASE CHECK THE APPROPRIATE BOX BELOW

☐ NO CHANGES. ☐ CHANGES NEEDED. SEE COMMENTS ON PLANS

VERIZON WIRELESS

4600 COLLEGE AVE.
APPLETON, WI 54913

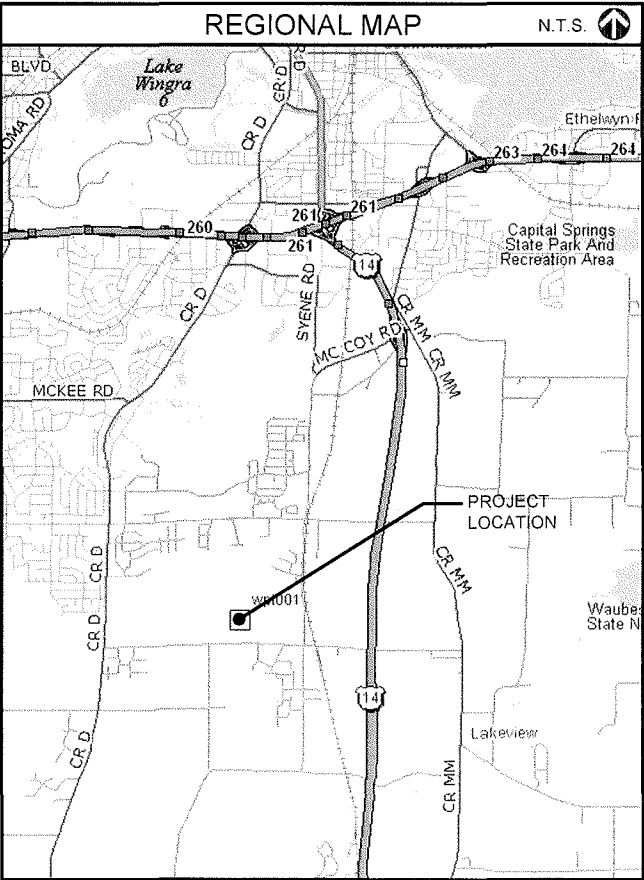
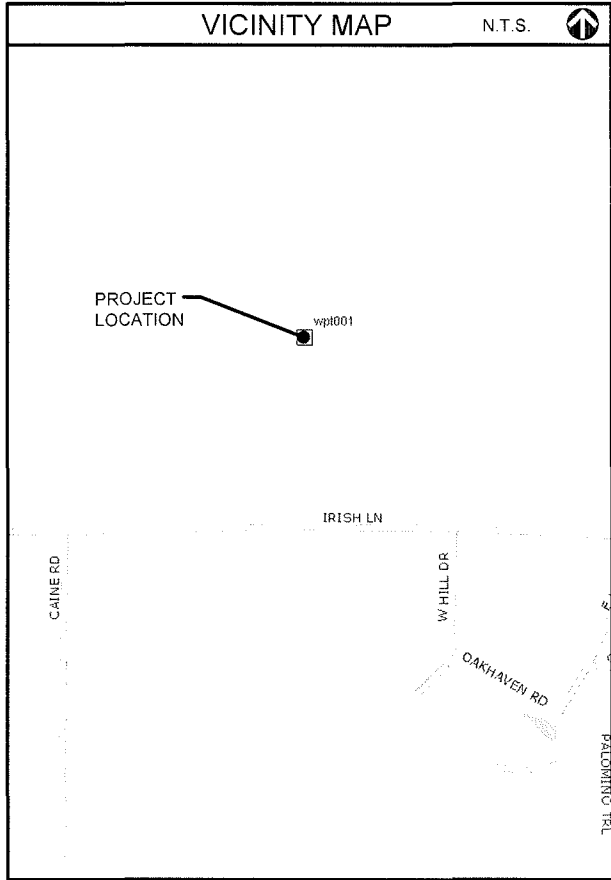
1515 WOODFIELD ROAD, SUITE 1400
SCHAUMBURG, ILLINOIS 60173

VERIZON WIRELESS
DEPARTMENT APPROVALS

	INITIALS	DATE
EQUIPMENT ENGINEER:		
CONSTRUCTION MANAGER:		
REAL ESTATE MANAGER:		

CONSULTANT TEAM

PROJECT CONSULTANT: TERRA CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
(847) 698-6400



PROJECT INFORMATION

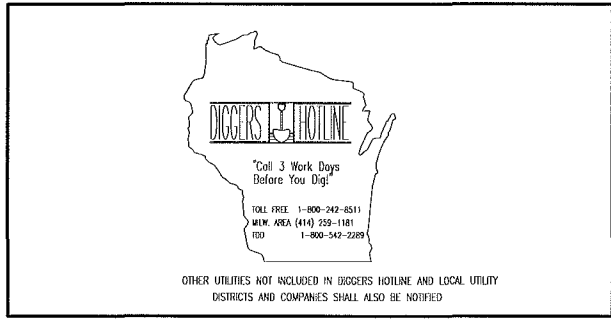
LOCATION #:	113572
SITE NAME:	IRISH LANE
SITE ADDRESS:	5282 IRISH LANE FITCHBURG, WI 53711
LATITUDE:	N 42° 59' 23.93" (APPROXIMATE)
LONGITUDE:	W 89° 24' 25.67" (APPROXIMATE)
APPLICANT:	VERIZON WIRELESS 4600 COLLEGE AVE. APPLETON, WI 54913
PROPERTY OWNER:	ROBERT P & MARY FAHEY 5370 IRISH LANE FITCHBURG, WI 53711
CONSTRUCTION MANAGER:	JON BARTELL 920-841-1263
REAL ESTATE MANAGER:	KEBREAB HENRY 847-706-1789

UTILITY INFORMATION

TELCO COMPANY:	-
POWER COMPANY:	-

SHEET INDEX		
SHEET	DESCRIPTION	REVISION
T-1	TITLE SHEET	1.,2.,3.
LP-1	LOCATION PLAN	3.
C-1	SITE PLAN	2.,3.
C-2	FOUNDATION DETAILS	-
E-1	ELECTRICAL SITE PLAN	-
E-2	GROUNDING PLAN	-
E-3	ELECTRICAL DETAILS	-
E-4	ELECTRICAL NOTES	-

FULL SCALE PRINT IS ON 24"x36" MEDIA



DRIVING DIRECTIONS

FROM LESSEE OFFICE:

TAKE IL-53 N/I-90 RAMP. MERGE ONTO I-90 W TOWARD ROCKFORD (CROSSING INTO WISCONSIN). MERGE ONTO US-51 N VIA EXIT 156 TOWARD STOUGHTON. TURN RIGHT ONTO CR-N. TURN LEFT ONTO CR-B. TURN RIGHT ONTO US-51/CR-B. TURN LEFT ONTO CR-B. TURN RIGHT ONTO CR-MM. TAKE THE 2nd LEFT ONTO IRISH LANE. SITE IS ON THE NORTH SIDE OF ROAD.

SPECIAL NOTES

HANDICAPPED REQUIREMENTS:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION HANDICAPPED ACCESS REQUIREMENTS NOT REQUIRED

PLUMBING REQUIREMENTS:
FACILITY HAS NO PLUMBING OR REFRIGERANTS

FAA AND FCC REQUIREMENTS:
THIS FACILITY SHALL MEET OR EXCEED ALL FAA AND FCC REQUIREMENTS

CONSTRUCTION REQUIREMENTS:
ALL WORK MUST CONFORM TO VERIZON WIRELESS CONSTRUCTION INSTALLATION STANDARDS & ALL APPLICABLE CODES AND ORDINANCES.

ATTACHMENTS		
-	-	-
-	-	-
-	-	-
-	-	-

VERIZON WIRELESS

TERRA CONSULTING GROUP, LTD.
600 Busse Highway
Park Ridge, IL 60068
Ph: 847/698-6400
Fax: 847/698-6401

NO	DATE	BY	DESCRIPTION
1	7/18/13	JAY	ISSUED FOR REVIEW
2	7/25/13	JAY	ISSUED FOR FINAL
3	7/30/13	JAY	REVISED PER ZONING JURISDICTION
	9/05/13	ML	ADDITIONAL DIMENSIONS

LOC. #113572

IRISH LANE

5282 IRISH LANE
FITCHBURG, WI 53711

DRAWN BY:	JAY
CHECKED BY:	TAZ
DATE:	6/25/13
PROJECT #:	33-1152

SHEET TITLE

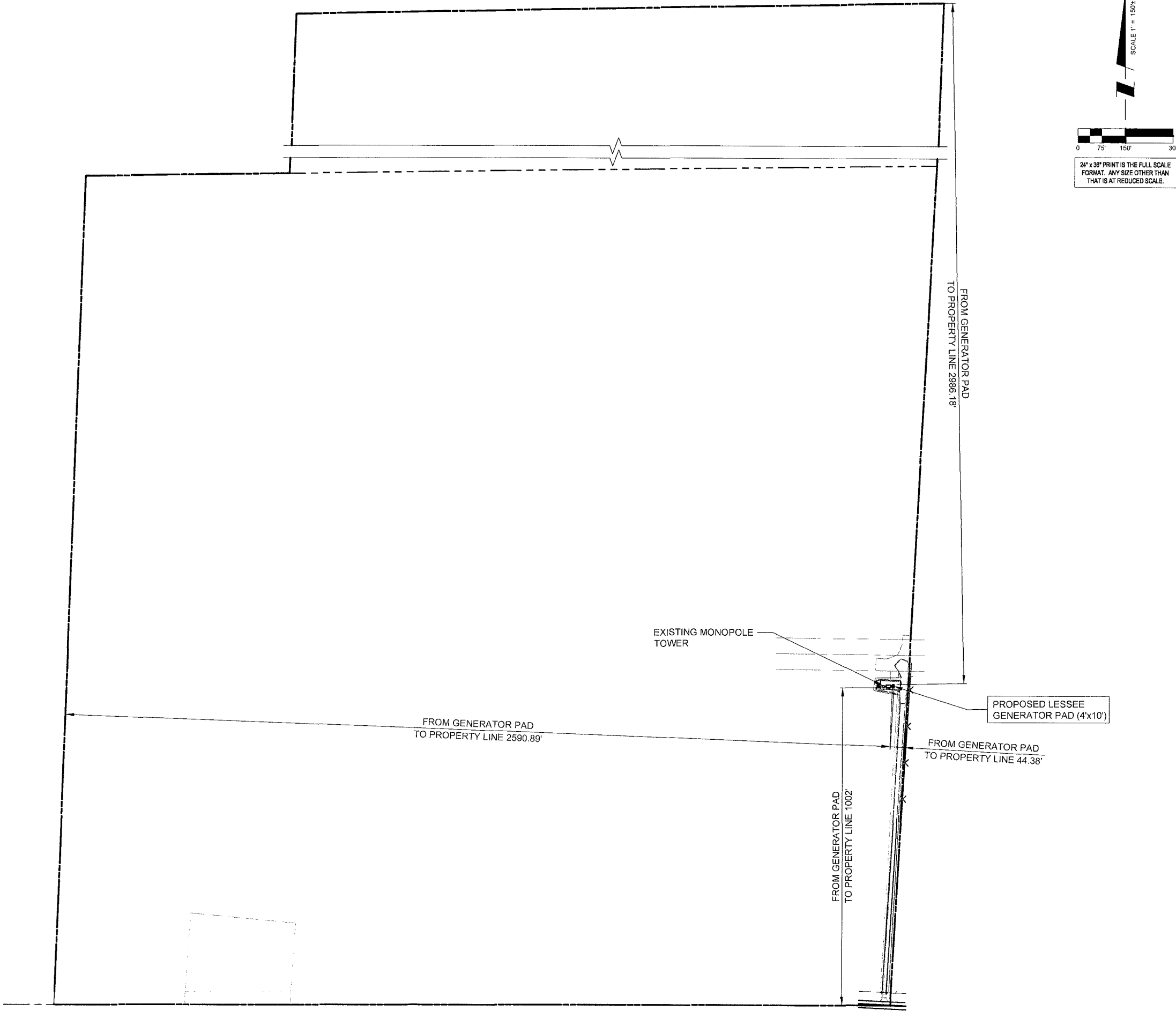
TITLE SHEET

SHEET NUMBER

T-1



OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED



24" x 36" PRINT IS THE FULL SCALE FORMAT. ANY SIZE OTHER THAN THAT IS AT REDUCED SCALE.

SCALE 1" = 150'

1 LOCATION PLAN
SCALE: 1" = 150'±

VERIZON
WIRELESS

TERRA
CONSULTING GROUP, LTD.

600 Busse Highway
Park Ridge, IL 60068
Ph: 847/698-6400
Fax: 847/698-6401

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LOC. #113572

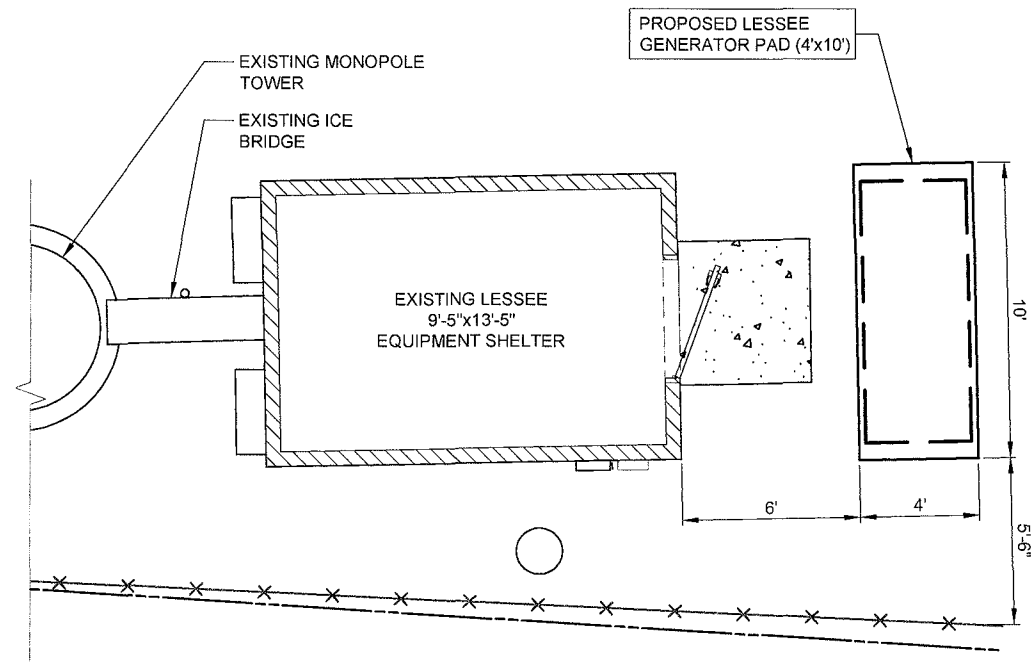
IRISH LANE

5282 IRISH LANE
FITCHBURG, WI 53711

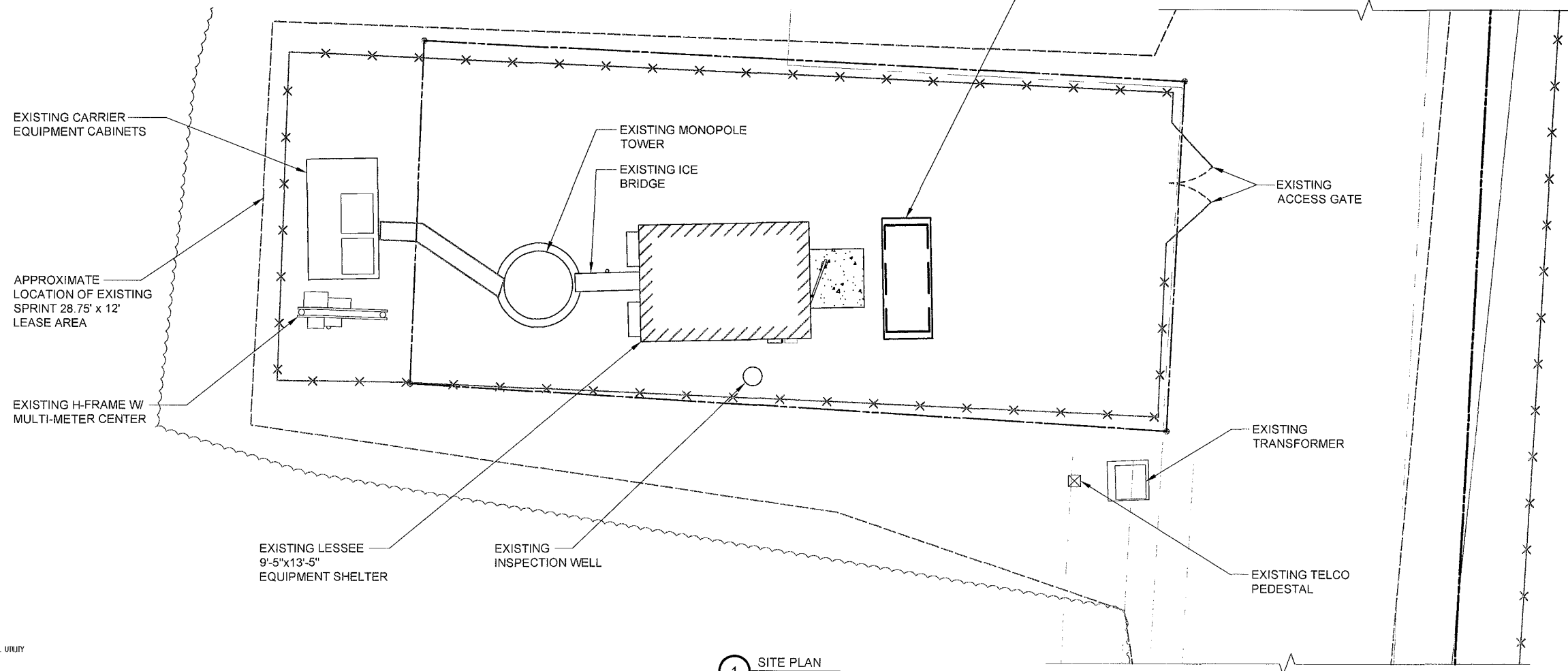
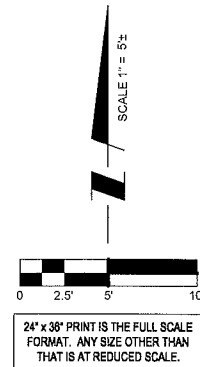
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SHEET TITLE
LOCATION PLAN

SHEET NUMBER
LP-1



2 SITE DIMENSION PLAN

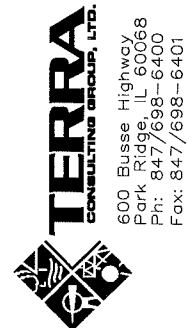


1 SITE PLAN
SCALE: 1" = 5'±



OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED

**VERIZON
WIRELESS**



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LOC. #113572

IRISH LANE

5282 IRISH LANE
FITCHBURG, WI 53711

DRAWN BY:	JAY
CHECKED BY:	TAZ
DATE	6/25/13
PROJECT #	33-1152

SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1



TERRA
CONSULTING GROUP, LTD.

600 Busse Highway
Park Ridge, IL 60068
Ph: 847/698-6400
Fax: 847/698-6401

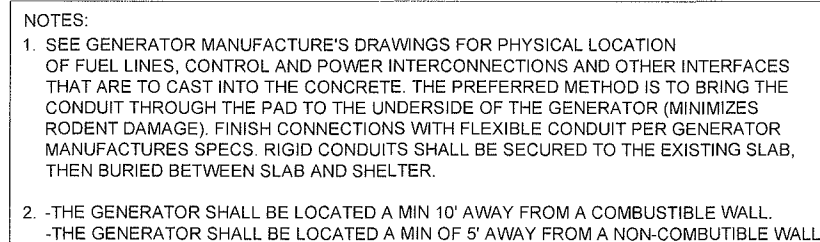
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3	ADDITIONAL DIMENSIONS	9/05/13	ML

IRISH LANE

DRAWN BY	JA
CHECKED BY	TA
DATE	6/25/1
PROJECT #	33-115

SHEET NUMBER

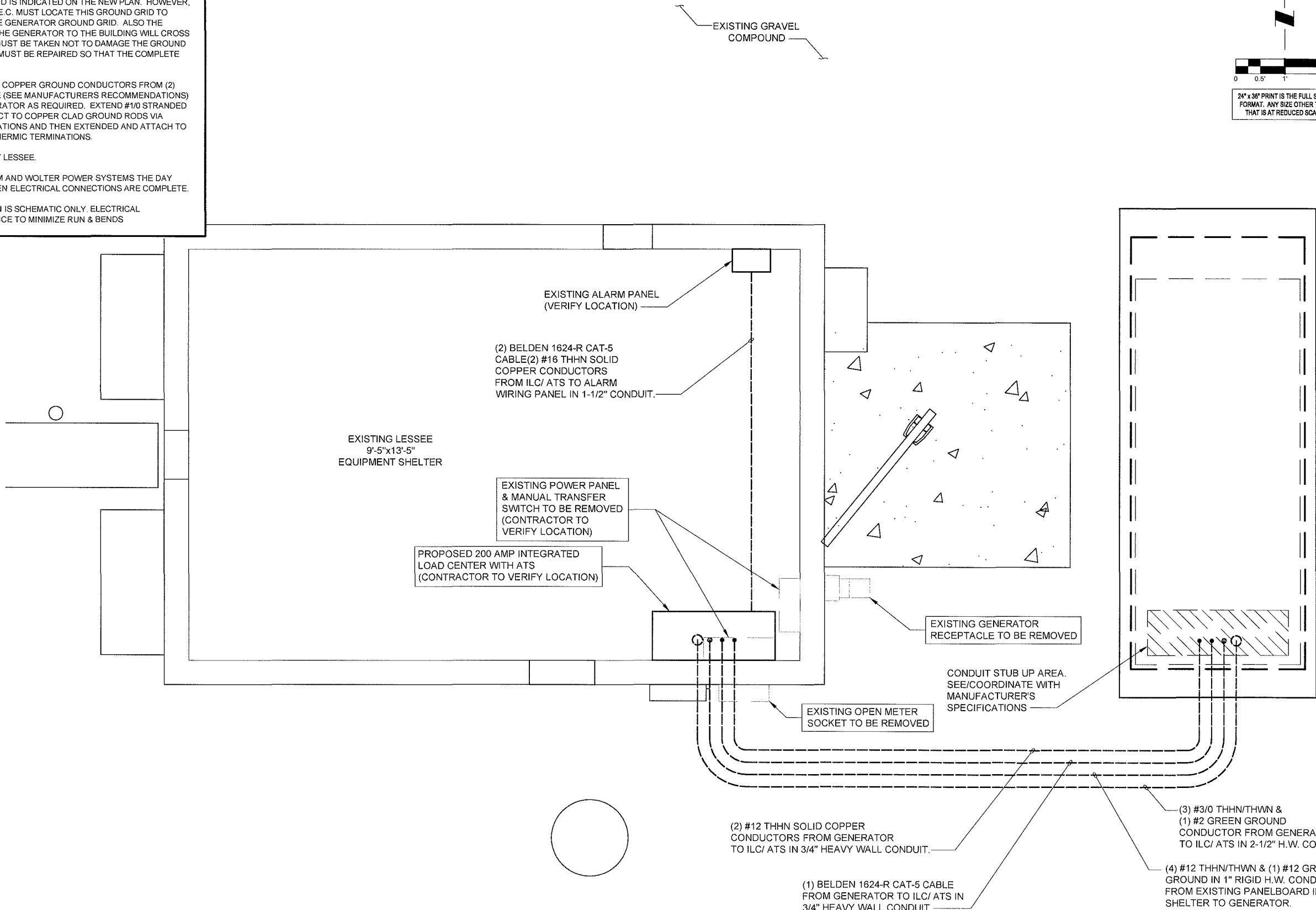
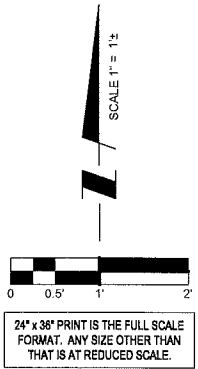
C-2



OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED.

NOTES:

- 1) ALL UNDERGROUND GROUND TERMINATIONS AND TERMINATIONS TO EXISTING BUILDING GROUND GRID TO BE HEAVY DUTY EXOTHERMIC (CAD WELD).
- 2) NEW AUTOMATIC TRANSFER SWITCH, INSTALLED AND WIRED BY E.C. CONNECT EXTERNAL GROUND LUG AND GROUNDING CONDUCTOR THAT WAS REMOVED FROM MANUAL TRANSFER SWITCH.
- 3) EXISTING BUILDING GROUND GRID IS INDICATED ON THE NEW PLAN. HOWEVER, EXACT LOCATION IS NOT KNOWN. E.C. MUST LOCATE THIS GROUND GRID TO PROVIDE THE ATTACHMENT OF THE GENERATOR GROUND GRID. ALSO THE UNDERGROUND CONDUITS FROM THE GENERATOR TO THE BUILDING WILL CROSS OVER THIS GROUND GRID. CARE MUST BE TAKEN NOT TO DAMAGE THE GROUND GRID. IF ANY DAMAGE OCCURS IT MUST BE REPAIRED SO THAT THE COMPLETE GRID SYSTEM REMAINS INTACT.
- 4) E.C. TO EXTEND #2 TINNED SOLID COPPER GROUND CONDUCTORS FROM (2) LOCATIONS ON GENERATOR FRAME (SEE MANUFACTURERS RECOMMENDATIONS) PROVIDE GROUND LUGS ON GENERATOR AS REQUIRED. EXTEND #1/0 STRANDED GROUND CONDUCTOR AND CONNECT TO COPPER CLAD GROUND RODS VIA HEAVY DUTY EXOTHERMIC TERMINATIONS AND THEN EXTENDED AND ATTACH TO BUILDING GROUND GRID VIA EXOTHERMIC TERMINATIONS.
- 5) NEW GENERATOR FURNISHED BY LESSEE.
- 6) CONTRACTOR TO NOTIFY VZW CM AND WOLTER POWER SYSTEMS THE DAY THE UNIT IS SET ON-SITE, AND WHEN ELECTRICAL CONNECTIONS ARE COMPLETE.
- 7) CONDUIT ROUTE SHOWN IN PLAN IS SCHEMATIC ONLY. ELECTRICAL CONTRACTOR TO USE BEST PRACTICE TO MINIMIZE RUN & BENDS



OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED

VERIZON
WIRELESS



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LOC. #113572

IRISH LANE

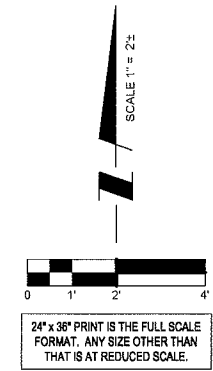
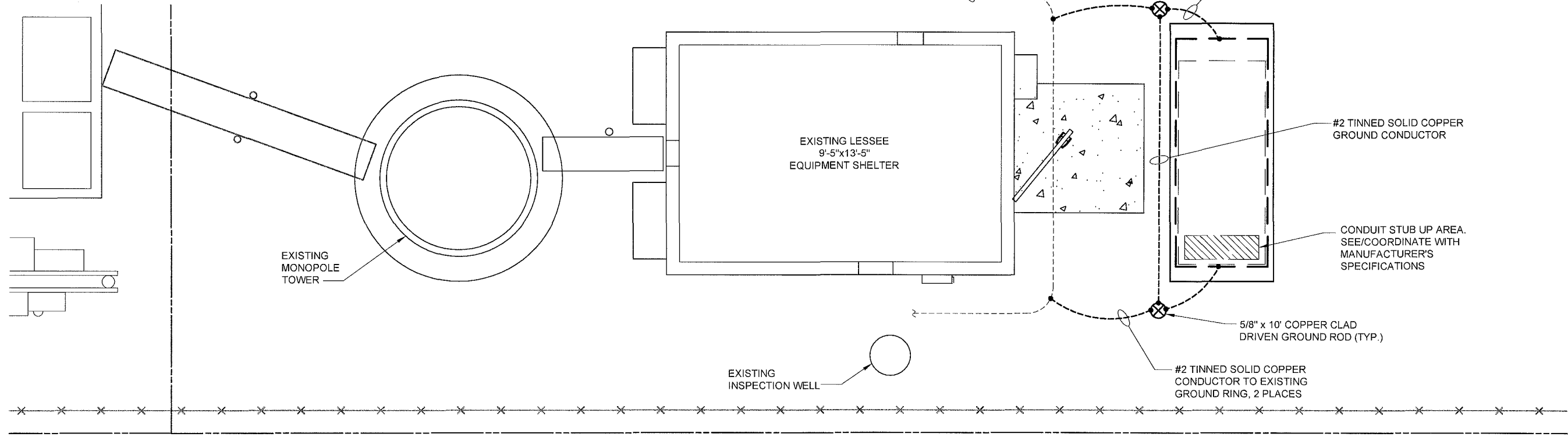
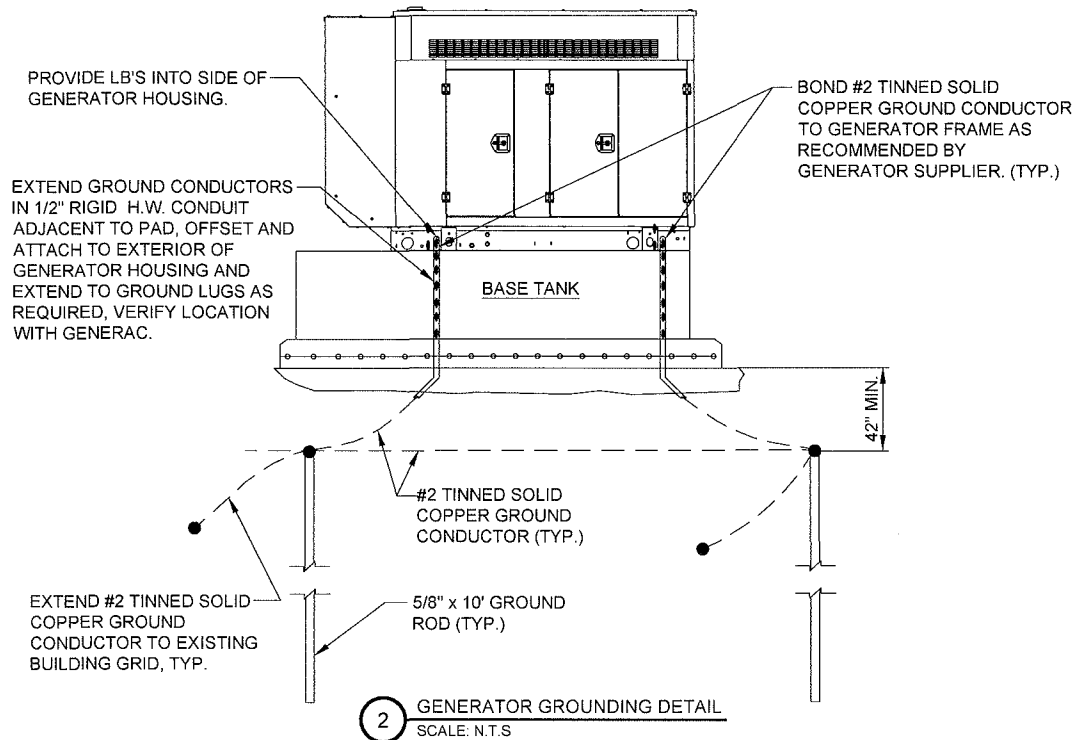
5282 IRISH LANE
FITCHBURG, WI 53711

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CHECKED BY	TAZ
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PROJECT #	33-1152

SHEET TITLE
ELECTRICAL
SITE PLAN

SHEET NUMBER

E-1



**VERIZON
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CONSULTING GROUP, LTD.

600 Busse Highway
Park Ridge, IL 60068
Ph: 847/698-6400
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LOC. #113572

IRISH LANE

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FITCHBURG, WI 53711

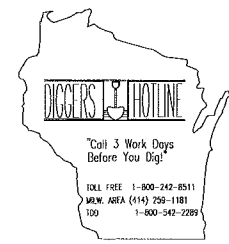
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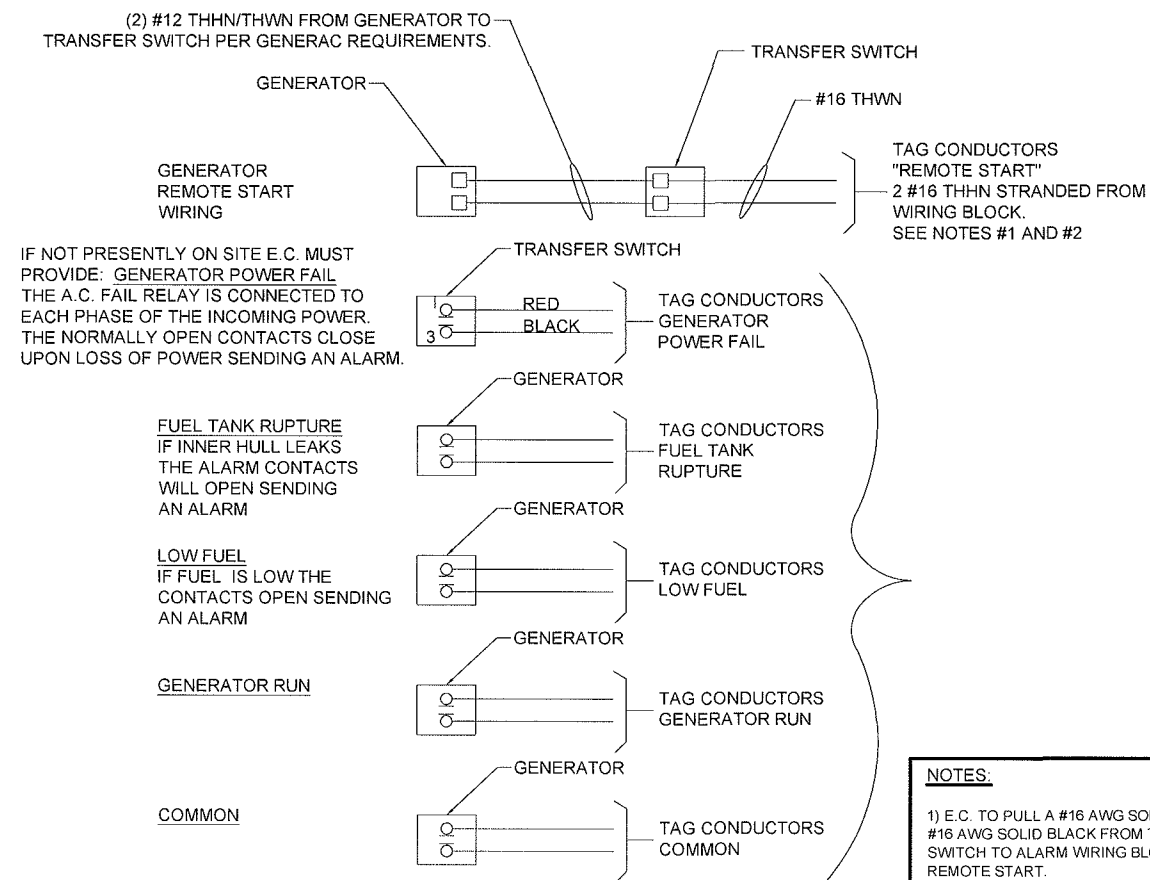
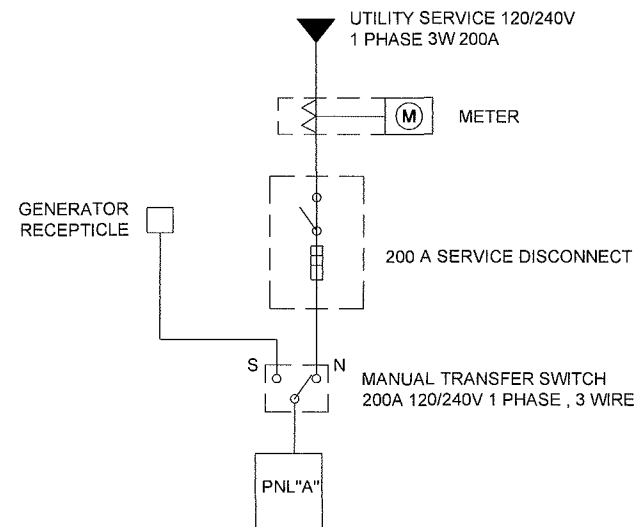
GROUNDING PLAN

SHEET NUMBER

E-2



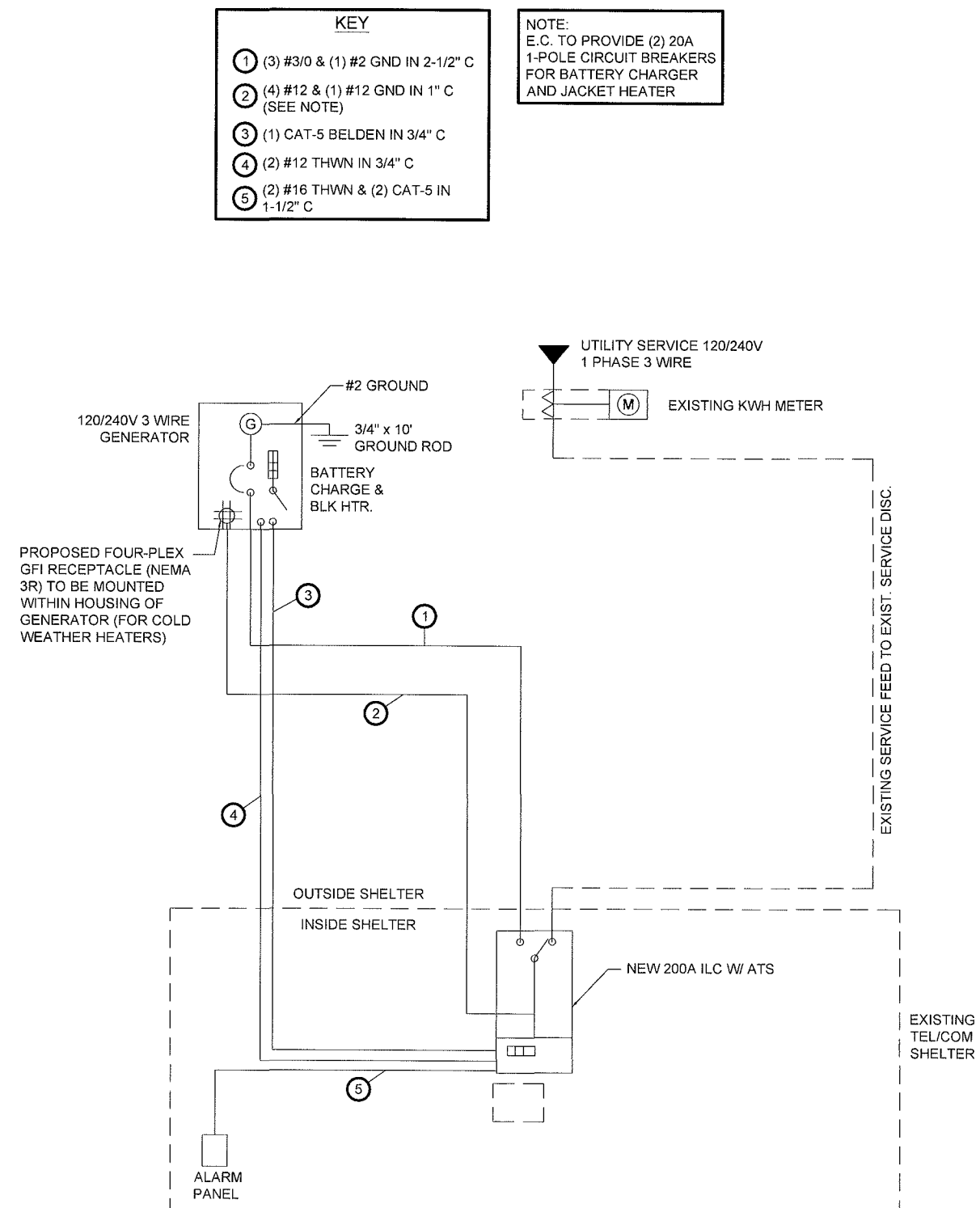
OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED




NOTES:

1) E.C. TO PULL A #16 AWG SOLID RED AND A #16 AWG SOLID BLACK FROM THE TRANSFER SWITCH TO ALARM WIRING BLOCK FOR REMOTE START.

2) E.C. TO PULL ALL ALARM LEADS TO EXISTING ALARM WIRING BLOCK. LEAVE A MINIMUM OF 24" PIGTAILS AT ALARM WIRING BLOCK AND TAG CONDUCTORS AS INDICATED. TERMINATIONS ON ALARM POINT WIRING BLOCK BY OTHERS. CONDUCTORS CAN BE RUN EXPOSED. THEY SHALL BE NEATLY BUNDLED USING NYLON TIES AND SUPPORTED AT 2'-0" INTERVALS FOR A NEAT INSTALLATION.



**VERIZON
WIRELESS**



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Park Ridge, IL 60068
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IRISH LANE

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FITCHBURG, WI 53711

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SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

E-3

A. WORK INCLUDED:
1. SCOPE
2. GENERAL REQUIREMENTS
3. CODES, PERMITS, FEES, AND SALES TAX
4. MATERIALS SUBSTITUTIONS
5. DRAWINGS AND SPECIFICATIONS
6. CUTTING AND PATCHING
7. CLEANUP AND PAINTING
8. IDENTIFICATIONS AND INSTRUCTIONS
9. SAFETY PRECAUTIONS
10. FINAL TESTS AND DEMONSTRATIONS
11. GUARANTEES
12. RECORD DRAWINGS
13. REVISIONS AND REMOVAL OF EXISTING EQUIPMENT

B. THE FOLLOWING IS INTENDED TO SERVE AS AN ELECTRICAL INDEX ONLY, WITHOUT INTENDING TO RESTRICT THE VOLUME OF WORK REQUIRED

SECTION 16010 - GENERAL PROVISIONS
SECTION 16100 - BASIC MATERIALS AND METHODS
SECTION 16400 - STANDBY GENERATOR

2. GENERAL REQUIREMENTS
A. THIS SECTION OF THE SPECIFICATIONS IS A SEPARATE CONTRACT AND INCLUDES THE FURNISH ALL LABOR, MATERIALS, TOOL, TRANSPORTATION, TEST EQUIPMENT, PERMITS, CERTIFICATES, TEMPORARY PROTECTION, AND STORAGE REQUIRED TO COMPLETE THE ELECTRICAL WORK

B. WHEREVER THE WORDS "THE ELECTRICAL CONTRACTOR" OR "CONTRACTOR" OR "THIS CONTRACTOR" APPEAR IN THIS DIVISION OF THE SPECIFICATIONS THEY APPLY SPECIFICALLY TO THE ELECTRICAL CONTRACTOR.

C. ELECTRICAL CONTRACTOR TO REVIEW ALL PROJECT CONTRACT DOCUMENTS, AND PROVIDE ALL MATERIALS AND LABOR FOR ALL ELECTRICAL REQUIREMENTS INDICATED.

D. CONTRACTOR SHALL READ THE ENTIRE SPECIFICATION, AND SHALL EXAMINE ALL THE PROJECTS PLANS THE PROPOSED CONSTRUCTION SITE AS HE WILL BE REQUIRED TO DO ALL OF THE ELECTRICAL WORK WHETHER OR NOT SPECIFICALLY MENTIONED HEREIN OR INDICATED OR SHOWN ON THE ELECTRICAL PLANS

E. SUCCESSFUL BIDDER WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING CONCERNING WHICH SUCH BIDDER MIGHT HAVE INFORMED HIMSELF PRIOR TO THE BID OPENING IT SHALL BE UNDERSTOOD THAT THE ACT OF SUBMITTING A BID CARRIES WITH IT THE AGREEMENT TO ALL ITEMS AND CONDITIONS REFEREED OR INDICATED OR IMPLIED ON THE CONTRACT DOCUMENT DRAWINGS AND THE SPECIFICATIONS.

F. IN THE EVENT OF A REQUEST FOR ADDITIONAL PAYMENT DUE TO CHANGES, SUBCONTRACTOR TO PROVIDE TO THE ENGINEERS A DETAILED DESCRIPTION OF CHANGES REQUIRED, INCLUDING REASONS FOR PROPOSED WORK AND A COMPLETE MATERIAL AND LABOR BREAKDOWN OF ALL ASSOCIATED COSTS.

G. THIS CONTRACTOR SHALL FURNISH AND REMOVE UPON COMPLETION OF THE PROJECT ALL SCAFFOLDING, RIGGING, HOISTING, AND SERVICES NECESSING FOR DELIVERY, ERECTION, AND INSTALLATION OF ALL EQUIPMENT AND APPARATUS REQUIRED TO BE INSTALLED BY THIS CONTRACTOR.

3. CODES, PERMITS, FEES, AND SALES TAX

A. INSTALLATION SHALL COMPLY WITH RULES AND REGULATIONS OF THE LATEST EDITION OF THE OCCUPATIONAL SAFETY AND HEALTH ACT, NATIONAL ELECTRICAL CODE, STATE ELECTRICAL CODE, LOCAL MUNICIPAL CODE, AMERICANS WITH DISABILITIES ACT (AD), THE ELECTRIC UTILITY FURNISHING ELECTRICAL ENERGY TO THIS PROJECT AND ANY OTHER BOARD HAVING JURISDICTION OVER THE ELECTRICAL INSTALLATION
B. CONTRACTOR SHALL BE LICENSED TO PERFORM ELECTRICAL WORK IN THE MUNICIPALITY IN WHICH THE PROJECT IS LOCATED AND SHALL OBTAIN ALL NECESSARY PERMITS FOR ELECTRICAL WORK AND SHALL PAY ALL REQUIRED FEES AND SALES OR USE TAX AS APPLICABLE TO THIS BRANCH OF WORK
UPON COMPLETION OF THE WORK, DELIVER TO THE OWNER WITHOUT COST ALL REQUIRED CERTIFICATES OF INSPECTION AND APPROVAL

4. MATERIAL AND EQUIPMENT SUBSTITUTIONS
A. MATERIAL OF OF THE TYPES FOR WHICH THERE ARE NATIONAL BOARD OF FIRE UNDERWRITERS (U.L.) LISTING AND LABEL SERVICE, SHALL SO BE LABELED AND SHALL BE USED BY THE CONTRACTOR

B. CONTRACTOR SHALL BID ON ITEMS AS SPECIFIED. IF THE CONTRACTOR DESIRES TO SUBSTITUTE ANY MATERIAL OR HE SHALL SUBMIT ALTERNATE BID ITEMS, WHICH SHALL BE LISTED ON A SEPARATE SHEET ACCOMPANYING THE BID, STATING MANUFACTURER, TRADE NAME, CATALOG DESIGNATION, AND AMOUNT OF DEDUCT FROM BASE BID IF ANY

C. MATERIALS BY MANUFACTURES OTHER THAN THOSE NAMED WILL BE CONSIDERED IF SUCH SUBSTITUTE ITEMS ARE EQUAL IN QUALITY AND OTHERWISE SIMILAR IN COMPOSITION, DESIGN, CONSTRUCTION, DIMENSION, CAPACITY, EFFICIENCY, FINNISH, AND PERFORMANCE

D. WHERE THE SUBSTITUTIONS HAVE BEEN ACCEPTED BY THE ENGINEERS AND IT IS LATER FOUND SUCH SUBSTITUTIONS ALTER THE DESIGN OR SPACE REQUIREMENTS INDICATED ON THE PLANS, THE CONTRACTORS SHALL BE RESPONSIBLE FOR THE COST INVOLVED TO REVISE THE BUILDING DESIGN AND CONSTRUCTION INCLUDING THE COST OF AO ALL ALLIED TRADES INVOLVED.

5. DRAWINGS AND SPECIFICATIONS

A. WORK CALLED FOR IN THESE SPECIFICATIONS, BUT NOT SHOWN ON THE DRAWINGS IN THEIR PRESENT FORM OR VICE VERSA, AND WORK NOT SPECIFIED IN EITHER CONTRACT SPECIFICATIONS OR DRAWINGS, BUT INVOLVED IN CARRYING OUT THEIR INTENT OR NECESSARY FOR COMPLETE AND PROPER EXECUTION OF THE WORK IS IS REQUIRED AND SHALL BE PERFORMED AS THOUGH IT WERE SPECIFICALLY OUTLINED OR DESCRIBED

B. THE INTENT OF THESE SPECIFICATIONS AND THE DRAWINGS IS TO INCLUDE A COMPLETE WIRING SYSTEM FORM SERVICE ENTRANCE TO EACH OUTLET INDICATED OR SPECIFIED, INCLUDING CONNECTING ALL ELECTRICAL DEVICES AND OR EQUIPMENT FURNISHED BY THE OWNER OR OTHER CONTRACTORS

C. ANY CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE DEEMED TO HAVE BEEN ESTIMATED THE MORE EXPENSIVE WAY OF THE WORK AND/OR THE MOST STRINGENT REQUIREMENTS SHALL PREVAIL

D. THE DRAWINGS, WHICH CONSTITUTE A PART OF THE CONTRACT, ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF CIRCUITS AND OUTLETS. GENERALLY, OUTLETS SHALL BE LOCATED REQUIRED BY CODE OR FOR PROPER INSTALLATION OF EQUIPMENT AND TO BE COORDINATED WITH WORK OF EQUIPMENT SUPPLIER

SECTION 16010
GENERAL PROVISIONS
1. SCOPE

6. CUTTING AND PATCHING

A. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING NECESSARY FOR THE ELECTRICAL WORK. IN THE EVENT HOLES MUST BE CUT THOUGH REINFORCED CONCRETE, THEY MUST BE CORE DRILLED AND WITH SPECIFIC APPROVAL OF THE ENGINEER

B. DAMAGE DONE BY THE ELECTRICAL CONTRACTOR SHALL BE REPAIRED BY THE ELECTRICAL CONTRACTOR SO THAT ALL THE DAMAGED AREA WILL MATCH SURROUNDING AREAS AND WILL FUNCTION AS ORIGINALLY INTENDED

7. CLEANUP AND PAINTING

A. REMOVE FROM THE SITE ALL DEBRIS AND RUBBISH ACCUMULATING AS A RESULT OF THE ELECTRICAL INSTALLATION. UPON COMPLETION OF THE PROJECT, DISPOSE OF ALL DEBRIS AND RUBBISH AND:
1. LEAVE ELECTRICAL EQUIPMENT AREAS BROOM CLEAN
2. CLEAN INTERIOR OF ALL PANEL CABINETS, PULL BOXES, AND OTHER EQUIPMENT ENCLOSURES.

B. WHERE PAINTED SURFACE OF EQUIPMENT HAVE BEEN ABUSED, REMOVED OR RUSTED DURING CONSTRUCTION, THIS CONTRACTOR SHALL PAINT SMAE TO MATCH ORIGINAL FACTORY OR SURROUNDING FINISH.

8. IDENTIFICATIONS AND INSTRUCTIONS

A. THE LOAD CENTER SHALL BE EQUIPPED WITH A DIRECTORY ACCURATELY INDICATING EQUIPMENT BEING SERVED.

B. ON BRANCH CIRCUITS, USE SHALL BE MADE OF ALL STANDARD COLORS AVAILABLE. WHERE WIRES OF DIFFERENT SYSTEMS JUNCTION IN A COMMON BOX, EACH CABLE SHALL BE GROUPED WITH ITS OWN SYSTEMS AND IDENTIFIED USING TAGS OR IDENTIFICATION STRIPS. ALL CONTROL AND SPECIAL SYSTEM WIRES SHALL ALSO BE CLEARLY IDENTIFIED BY DESCRIPTION AND LOCATION.

9. SAFETY PRECAUTIONS

A. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND PLACE GUARDS FOR PREVENTING OF ACCIDENTS FOR ALL WORK COVERED BY THIS CONTRACT. HE SHALL PROVIDE AND MAINTAIN ANY NECESSARY OSHA REQUIRED CONSTRUCTION NECESSARY TO SECURE SAFETY OF LIFE OR PROPERTY.

10. FINAL TESTS AND DEMONSTRATIONS

A. UPON COMPLETION OF THE WORK, THE ELECTRICAL INSTALLATION SHALL TEST ENTIRELY FREE OF GROUNDS AND SHORT CIRCUITS. ALL FEEDERS TOP BE MEGGERED. MADE ELECTRODES TO BE TESTED WITH A DIRECT READING GROUND RESISTANCE TESTER. ONE (1) COPY OF MEGGER READINGS AND GROUND RESISTANCE TEST TO BE SUBMITTED TO OWNER AND ONE (1) COPY TO ENGINEER.

B. ALL AUXILIARY SYSTEMS SHALL BE CHECKED FOR OPTIMUM PERFORMANCE AND ALL MOTORS SHALL BE CHECKED FOR PROPER ROTATION

C. CONTRACTOR SHALL BALANCE LOAD AMONG THE FEEDER CONDUCTORS AT THE LOAD CENTER, AND SHALL RECONNECT LOADS AS MAY BE NECESSARY TO OBTAIN A MAXIMUM OF 7 1/2% UNBALANCE OF LOAD ON EACH LEG.

D. THE CONTRACTOR SHALL UPON REQUEST DEMONSTRATE PROPER OPERATION OF ALL ELECTRICAL SYSTEMS AND EQUIPMENT IN THE PRESENCE OF THE ENGINEER AND/OR OTHER DESIGNATED PERSONS

II. GUARANTEES

A. ELECTRICAL CONTRACTOR SHALL LEAVE THE ENTIRE ELECTRICAL SYSTEMS IN GOOD WORKING ORDER AND SHALL AT HIS EXPENSE REPAIR, REBUILD, REMOVAL, AND MAKE GOOD AND ACCEPTABLE ALL DEFECTIVE LABOR AND MATERIALS THAT MATERIALS THAT MAY DEVELOP WITHIN ONE (1) YEAR AFTER COMPLETION AND FINAL ACCEPTANCE OF THE WORK HERE UNDER AND AS FURTHER DESCRIBED UNDER DIVISIONS OF THE SPECIFICATIONS

B. IT MAY BE NECESSARY TO ENERGIZE PORTIONS OF THE ELECTRICAL SYSTEM PRIOR TO FINAL ACCEPTANCE OF THE COMPLETED WORK BY THE OWNER. IT IS THE INTENT OF THESE SPECIFICATIONS THAT THE GUARANTEE PERIOD SHALL BE ONE (1) FULL YEAR AFTER FINAL ACCEPTANCE

12. RECORD DRAWINGS

A. CONTRACTOR SHALL KEEP AN UP TO DATE SET OF "RECORD DAWINGS" KEPT CURRENT ON A DAILY BASIS. SUCH DRAWINGS SHALL BE AVAILABLE TO THE ENGINEER OR HIS REPRESENTATIVE AT THE JOB SITE AT ALL TIMES. UPON COMPLETION OF THE CONTRACT TURN OVER TO THE ENGINEER ONE COMPLETE SET OF REPRODUCIBLE DRAWINGS

13. REVISIONS AND REMOVAL OF EXISTING EQUIPMENT

A. CONTRACTOR SHALL NOTE THAT THE EXISTING BUILDING WILL REMAIN IN SERVICE DURING CONSTRUCTION. ALL WORK SHALL BE DONE IN A TIMELY MANNER AND IN COMPLIANCE WITH THE "SEQUENCE OF CONSTRUCTION" LISTED ON THE PLANS
B. ANY EXISTING CIRCUITS OR EQUIPMENT NOT SHOWN ON THE DRAWINGS AND WHICH ARE LOGICALLY EXPECTED TO BE CONTINUED IN SERVICE AND WHICH MAY BE INTERRUPTED OR DISTURBED DURING CONSTRUCTION, SHALL BE RECONNECTED IN A APPROVED MANNER. IN ADDITION, ANY EXISTING CIRCUIT OR EQUIPMENT, WHICH MAY REQUIRE RELOCATION OR REROUTING AS A RESULT OF CONSTRUCTION, SHALL BE CONSIDERED A PART OF THE WORK OF THIS BRANCH AND SHALL BE DONE BY THIS CONTRACTOR WITH NO ADDITIONAL COMPENSATION.

C. KEEP ALL EXISTING ELECTRIC CIRCUITS, TELEPHONE SERVICE, AND ALARM SIGNAL SYSTEMS IN OPERATION DURING CONSTRUCTION AS REQUIRED BY THE OWNER.

SECTION 16100
BASIC MATERIALS AND METHODS

1. SCOPE

A. THIS SECTION OF WORK INCLUDES THE BASIC MATERIALS TO INSTALL, CONNECT AND COMPLETE ELECTRICAL WORK IN A FINISHED WORKMANLIKE MANNER

B. WORK INCLUDED:

- SCOPE
- RACEWAY SYSTEM
- SUPPORT OF CONDUIT
- CONDUIT FITTINGS
- FIRE STOPS
- LOCATION OF EQUIPMENT
- WIRE AND WIRING METHOD-600 VOLT AND BELOW
- CONCRETE PLATFORMS AND BASES

2. RACEWAY SYSTEMS
A. FURNISH AND INSTALL A COMPLETE CONDUIT RACEWAY SYSTEMS FOR ALL FEEDERS, BRANCH CIRCUITS AND COMMUNICATION CIRCUITS AS SHOWN ON THE PLANS.

B. ALL CONDUIT SHALL BE FURNISHED IN MANUFACTURED LENGTHS AND U.L. LISTED FOR EACH MANUFACTURED LENGTH. RIGID HEAVY WALL CONDUIT SHALL BE FULL WEIGHT, HOT DIP GALVANIZED STEEL CONDUIT. E.M.T. SHALL BE ELETRO-GALVANIZED MILD STEEL WITH THOROUGHLY WELDED SEAMS.

C. RIGID HEAVY WALL STEEL CONDUIT MUST BE USED IN THE FOLLOWING LOCATION:
1. ALL CONDUIT EXPOSED OUTDOORS.
2. ALL CONDUIT INSTALLED IN CONCERT THAT IS ON GRADE OR BELOW GRADE.
3. ALL CONDUIT RUN UNDERGROUND.

D. DIRECT BURIED CONDUIT SHALL BE:

1. RIGID HEAVY WALL STEEL CONDUIT
2. WHERE HEAVY TRUCK TRAFFIC IS ANTICIPATED, CONDUIT TO BE ENCASED IN A 3" CONCRETE ENVELOPE IN THAT AREA
3. INSTALLED ON UNDISTURBED EARTH AND SURROUNDED BY A 3" SAND ENVELOPE (WHEN NOT CONCRETE ENCASED.)

E. ELECTRIC METALLIC TUBING (THIN WALL CONDUIT) BEARING THE UL LABEL OF APPROVAL MAY BE USED FOR BRANCH CIRCUIT WIRING AND FOR AUXILIARY SYSTEMS EXCEPT IT SHALL NOT BE USED FOR RUNS SPECIFIED TO BE INSTALLED IN RIGID CONDUIT. (SEE PARAGRAPH C.)

F. CONDUIT SHALL BE CONTINUOUS FROM OUTLET, AND FROM OUTLETS TO CABINETS, JUNCTION OR PULL BOXES. SUCH THAT EACH SYSTEM SHALL BE ELECTRICALLY CONTINUOUS FROM POINT OF SERVICE TO ALL OUTLETS. ENTIRE RACEWAY SYSTEMS SHALL BE MADE WATER TIGHT WHERE INSTALLED IN WET PLACES, UNDERGROUND OR WHERE BURIED IN MASONRY OR CONCRETE.

G. CONDUIT RUNS THAT EXTEND THROUGH AREAS OF DIFFERENT TEMPERATURE OR ATMOSPHERIC CONDITIONS OR THAT ARE PARTLY INDOORS AND PARTLY OUTDOORS, SHALL BE SEALED AND INSTALLED IN A MANNER THAT WILL PREVENT DRAINAGE OF CONDENSED OR ENTRAPPED MOISTURE INTO CABINETS, MOTOR AND EQUIPMENT ENCLOSURES. OVERHEAD CONDUIT SHALL BE PROVIDE WITH SEAL AND DRAIN FITTINGS TO PROVIDE CONTINUOUS AUTOMATIC DRAINAGE.

H. CONDUIT AND SLEEVES SHALL BE LOCATED AS CLOSE TO THE MIDDLE OF CONCRETE SLABS AS PRACTICAL WITHOUT DISTURBING THE REINFORCEMENT. OUTSIDE DIAMETER SHALL NOT EXCEED 1/3 OF THE SLAB THICKNESS AND CONDUIT SHALL NOT BE SPACED CLOSER THAN THREE TIMES CONDUIT DIAMETER AND SHALL OTHERWISE COMPLY WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE "MANUAL OF CONCRETE PRACTICE" - AC 31-347"

I. FLEXIBLE METAL CONDUIT IN CODE APPROVED LENGTHS AND SIZES SHALL BE USED FOR FINAL CONNECTIONS OF ALL EQUIPMENT SUBJECT TO VIBRATION OR MOVEMENT, FOR ALL MOTORS. LIQUID TIGHT FLEXIBLE CONDUIT SHALL BE USED IN WET LOCATIONS. A SEPARATE GROUND WIRE SHALL BE PROVIDE THOUGH ALL FLEXIBLE CONNECTIONS.

3. SUPPORT OF CONDUIT

A. CONDUIT SHALL BE SECURELY FASTENED TO STRUCTURAL PARTS OF THE BUILDING SUPPORTING DEVICES SHALL BE SPECIFICALLY DESIGNED FOR THE APPLICATION. PERFORATED HANGER IRON IS NOT ACCEPTABLE.

B. FURNISH SUPPORTS ASM REQUIRED BY CODE, BUT IN ANY EVENT DO NOT EXCEED 10' BETWEEN ANT SUPPORTS.

4. CONDUIT FITTINGS

A. CONDUIT TERMINATION AT CABINETS AND BOXES SHALL BE RIGIDLY SECURED WITH GALVANIZED LOCK NUTS AND BUSHINGS AS REQUIRED BY CODE.

1. TERMINATION FOR RIGID HEAVY WALL STEEL CONDUIT SHALL BE LIQUID TIGHT, MADE OF STEEL WITH INSULATED THROATS AND DOUBLE LOCK NUTS
2. TERMINATION FOR E.M.T. SHALL BE RAIN-TIGHT COMPRESSION TYPE MADE OF STEEL. MALE FITTINGS TO HAVE INSULATED THROATS
3. INDETOR, SET-SCREW CAST OR DRIVEN-ON TYPE COUPLINGS OR CONNECTORS ARE NOT ACCEPTABLE.
4. APPROVED MANUFACTURES: RACO, STEEL CITY, T&B MIDWEST OR APLETION.

B. RUNNING THREADS WILL NOT BE PERMITTED. WHERE REQUIRED, USE MANUFACTURED THREAD'S COUPLINGS. SET SCREW AND SPLIT TYPE CONNECTORS ARE NOT ACCEPTABLE.

C. PROVIDE EXPANSION -DEFLECTION FITTINGS IN ALL METALLIC CONDUIT RUNS WHERE CROSSING EXPANSION JOINTS IN A STRUCTURAL WALL OR SLAB.

D. CONDUITS PASSING THOUGH EXTERIOR FOUNDATION WALLS OF THE BUILDING SHALL BE EQUIPPED WITH WALL ENTRANCE SEALS, O.Z. TYPE FSK, FSC, WSK, WSC, OR FST

5. FIRE STOPS

A. WHERE CONDUITS OR EXPOSED CABLES PENETRATE FIRE STOPPED WALLS, PARTITIONS, CEILINGS, FLOORS, ETC. APPROVED FIRE STOP DEVICES SHALL BE USED TO KEEP FIRE RATING INTEGRITY

B. FIRE STOPS TO BE NELSON ELECTRIC TYPE MCT OR HUBBELL FP OR WALKER 1600/1500 SERIES.

6. LOCATION OF OUTLETS AND EQUIPMENT

A. LOCATION OF OUTLETS AND EQUIPMENT AS SHOWN ON PLANS IS APPROXIMATE AND EXACT LOCATION IS TO BE VERIFIED BY THE CONTRACTOR AND WILL BE DETERMINED BY:
1. EQUIPMENT MANUFACTURER'S DRAWINGS
B. MINOR MODIFICATIONS IN THE LOCATION OF OUTLETS AND EQUIPMENT IS CONSIDERED A PART OF THIS SPECIFICATION AND SHALL BE MADE WITH NO ADDITIONAL COMPENSATION

7. WIRE AND WIRING METHOD-600VOLT AND BELOW

A. ALL WIRE SIZES AND ALL CONDUIT SIZES SHOWN ON THE PLANS ARE FOR COPPER CONDUCTORS. CONDUCTORS FOR FEEDERS, BRANCH CIRCUITS CONTROL, AND OTHER CIRCUITS 600 VOLTS AND BELOW SHALL HAVE 600 VOLT INSULATION: NO 12MMIMUM UNLESS NOTED OTHERWISE, FACTORY COLOR CODED (SEE PARAGRAPH B.) ALL WIRE AND CABLE SHALL BE AS MANUFACTURED BY OKONITE, ROME, COLLYER, CABLEC, OR AS OTHERWISE APPROVED AND AS FOLLOWS

1. TYPE THWN/THHN SOILD OR STRANDED IN ALL GENERAL AREAS FOR NO. 12 AND NO 10 AWG BRANCH CIRCUIT WIRING
2. TYPE THWN/THHN STRANDED FOR ALL WIRE NO. 8 AWG AND LARGER

B. CONDUCTORS FOR ALARM SYSTEM SHALL BE AS MANUFACTURED BY BELDEN CORPORATION AND AS FURTHER DESCRIBED HEREIN.
1. INSERIAL, NO.16 AWG 2 CONDUCTOR, TINNED COPPER, POLYETHYLENE INSULATED, CONDUCTORS CABLE, STRANDED TINNED COPPER DRAIN WIRE AND CHROME VINYL OUTER JACKET

C. JOINTS, TAPS, AND SPLICES IN CONDUCTORS. NO.10 AWG AND SMALLER SHALL BE MADE WITH COMPRESSION TYPE SOLDER LESS CONNECTORS WITH PLASTIC COVERS AND SHALL BE 3M "SCOTCHLOK", IDEAL "SUPER NUT" OR BUCHANON "B-CAPS".

D. JOINTS, TAPS, AND SPLICES IN CONDUCTORS NO. AWG AND LARGER SHALL BE MADE WITH SOLDER LESS PRESSURE TYPE CONNECTORS SIMILAR TO BURNDY, ANDERSON, THOMAS & BETTS COMPANY OR APPROVED EQUAL. EACH TAP, JOINT AND SPLICE IN CONDUCTORS NO.8 AWG AND LARGER SHALL BE TAPED WITH TWO HALF-LAP LAYERS OF SCOTCH NO. 33 VINYL PLASTIC ELECTRICAL TAPE. MARKING TO BE MADE BY SCOTCH NO. 35 COLOR CODING TAPE. EQUAL TAPES BY PLYMOUTH ARE ACCEPTABLE

8. CONCRETE PLATFORMS AND BASES

A. THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL CONCRETE PLATFORMS AND BASES SHOWN ON THE ELECTRICAL PLANS. THIS SHALL INCLUDE BASES FOR STAND BY GENERATOR.

B. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO CHECK MANUFACTURER'S CERTIFIED EQUIPMENT DRAWINGS IN ORDER TO DETERMINE EXACT DIMENSIONS AND OTHER REQUIREMENT. CONTRACTOR SHALL FURNISH AND INSTALL ALL ANCHOR BOLTS REQUIRED.

SECTION 16400
STANDBY GENERATOR

1. THIS SECTION OF THE WORK INCLUDES ALL THE NECESSARY EQUIPMENT, MATERIALS AND WORK REQUIRED TO RECEIVE, INSTALL, AND WIRE A COMLPETE EMERGENCY GENERATOR SYSTEM.

- B. WORK INCLUDED:
1. SCOPE
2. GROUNDING
3. FEEDERS
4. BRANCH CIRCUITS
5. STANDBY GENERATOR

2. GROUNDING

A. A COMPLETE GROUNDING GRID SYSTEM SHALL BE (PROVIDE AS SHOWN ON THE PLANS AND SHALL BE TIED INTO THE BUILDING GROUND GRID AS SHOWN.

B. CARE MUST BE TAKEN TO DIG UP AND EXPOSE THE EXISTING UNDERGROUND BUILDING GROUND GRID.

C. HEAVY DUTY EXOTHERMIC (CAD WELD) CONNECTIONS MUST BE MADE FROM THE GENERATOR GROUND GRID TO THE BUILDING GROUND GRID AS SHOWN ON THE PLANS AT THE TWO LOCATIONS INDICTED.

D. IF THE BUILDING GROUND GRID IS DAMAGED DURING THE EXCAVATION OF THE GENERATOR GROUND GRID OR THE INSTALLATION OF THE UNDERGROUND CONDUIT SYSTEM BETWEEN THE GENERATOR AND THE BUILDING, IT MUST BE RESTORED TO ITS ORIGINAL CONFIGURATION AND OPERATING CONDITION.

3. FEEDERS

A. FURNISH, INSTALL, AND CONNECT FEEDERS IN ACCORDANCE WITH INFORMATION ON THE DRAWINGS WITH CONDUCTORS INSULATION TO CONFORM TO REQUIREMENT OF THESE SPECIFICATION.

B. EACH CONDUIT RACEWAY SHALL CONTAIN ONLY THOSE CONDUCTORS CONSTITUTING A SINGLE FEEDER CIRCUIT

C. FEEDER CONDUCTORS SHALL BE SIZED SO TO PROVIDE A MAXIMUM OF 5% VOLTAGE DROP PER N.E.C. ARTICLE 215(B)-(F P N. NO2)

D. CONDUCTOR SUPPORTS IN VERTICAL RACEWAYS SHALL MEET THE REQUIEMENTS OF ARTICLE 300-19 OF THE N.E.C. LATEST ADDITION

4. BRANCH CIRCUITS

FURNISH AND INSTALL A COMPLETE BRANCH CIRCUIT AND CONTROL WIRING SYSTEM AS INDICATED ON THE PLANS. BALANCED LOAD ON THE PANEL BOARD BUS IS TO THE DETERMINE FACTOR IN ARRANGEMENT OF CIRCUIT. PANEL BOARD LOADING SHALL BE BALANCED TO ±10%

B. NO WIRE SMALLER THEN 12 AWG (UNLESS OTHERWISE NOTED) SHALL BE USED FOR BRANCH CIRCUIT WIRING INCLUDING MOTOR CIRCUITS
BRANCH CIRCUITS 15 AMP AND 20 AMP MUST BE SIZED FOR LENGTH OF RUN ON THE FOLLOWING BASIS.

1. IN GENERAL, BRANCH CIRCUIT WIRING SHALL BE PROVIDE TO LIMIT VOLTAGE DROP TO 3% AT ANY OUTLET PER I.E. ARTICLE 210 19(a)(F P N. NO. 4)

2. THE FOLLOWING WILL BE CONSIDERED AS MINIMUM REQUIEMENTS.

a. 120 VOLT CIRCUITS
(1) 0 TO 75 FOOT RUNS FROM PANEL BOARD TO FIRST OUTLET. NO. 12 AWG MINIMUM
(2) 75 TO 150 FOOT RUN: INCREASE ONE WIRE SIZE TO NO.10 AWG

5. STANDBY GENERATOR

A. THE STANDBY GENERATOR SHALL BE FURNISH BY LESSEE AND SHALL BE RECEIVED, INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR AS SHOWN ON THE PLANS

B. THE GENERATOR SHALL BE RATED NOT LESS THAN 60 KW AS MANUFACTURED BY GENERAC POWER SYSTEMS, INC.

C. AUTOMATIC TRANSFER SWITCHES SHALL BE FURNISHED BY LESSEE, INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR AS SHOWN ON THE PLANS AND AS INDICATED IN THE SEQUENCE OF CONSTRUCTION

D. AFTER INSTALLATION BUT PRIOR TO CONNECTION TO THE BUILDING LOAD CENTER A STARTUP TEST MUST BE RUN AND ALL COMPONENTS CHECKED OUT FOR PROPER INSTALLATION. STARTUP TEST MUST BE DONE BY THERMFLO WITH THE ELECTRICAL CONTRACTOR PRESENT. LOADS SHALL BE TESTED AT 75% AT THE RATE KW FOR 2 HOURS AND AT RATED KW FOR 2HOURS. CHECK VOLTAGE FREQUENCY OIL PRESSURE, WATER TEMPERATURE. PROVIDE A TEST REPORT ON ALL THE RESULTS. RECORDS GENERATOR FRAME TEMPERATURE AT HOTTEST AFTER THE UNIT HAS CARRIED THE FULL LOAD FOR 2 HOURS. ALL ADJUSTMENTS AND REPLACEMENTS OF UNSATISFACTORY EQUIPMENT MUST BE MADE BY THE GENERATOR MANUFACTURER PRIOR TO FINAL CONNECTION TO THE LOAD CENTER.

VERIZON
WIRELESS



600 Busse Highway
Pork Ridge, IL 60068
Ph: 847/698-6400
Fax: 847/698-6401

REVISIONS						
NO	DESCRIPTION	DATE	BY	ISSUED FOR REVIEW	ISSUED FOR FINAL	REVISED PER ZONING JURSDICTION
1		7/18/13	JAY			
2		7/25/13	JAY			
3		7/30/13	JAY			
		9/05/13	ML			

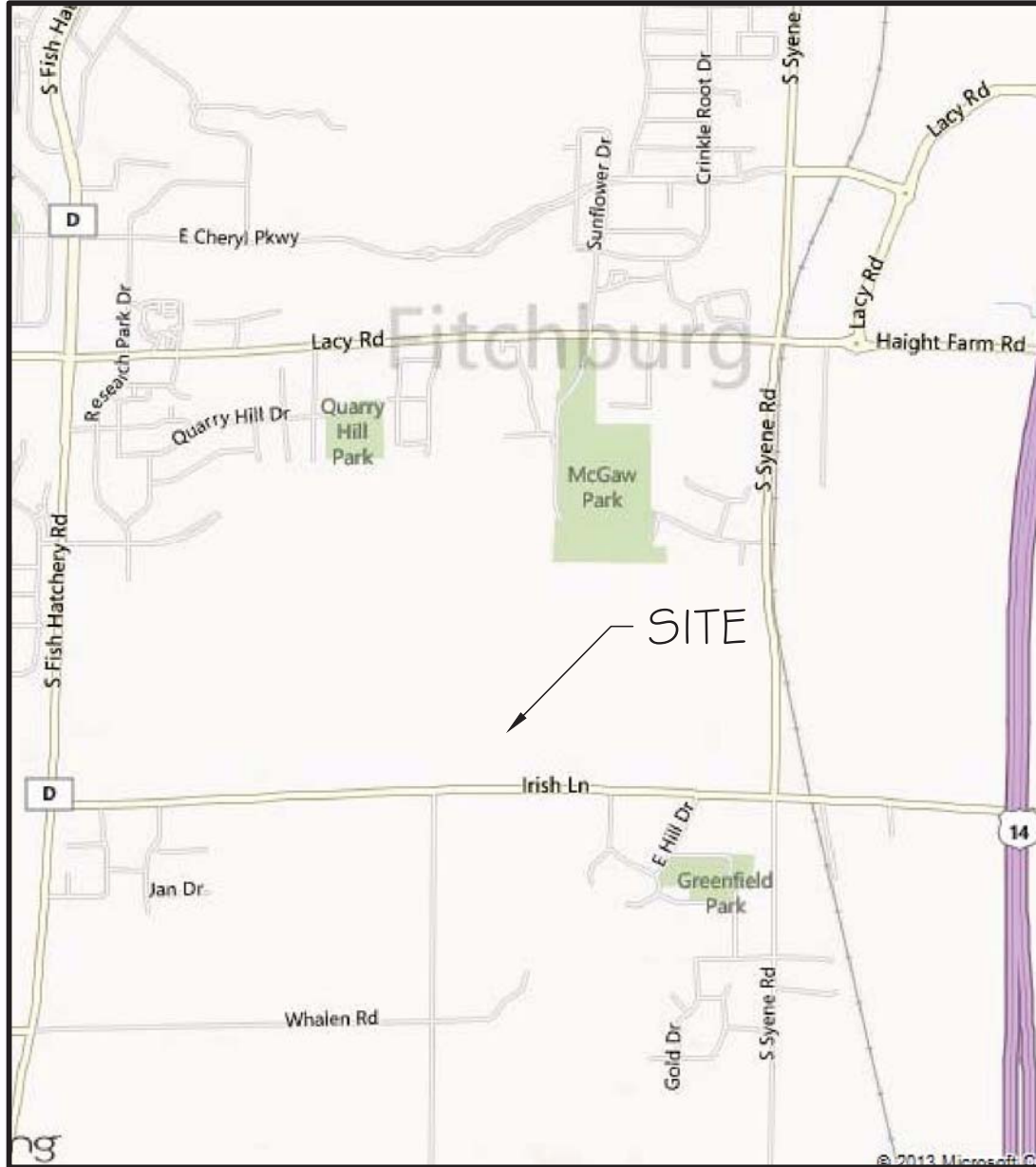
LOC. #113572

IRISH LANE

5282 IRISH LANE
FITCHBURG, WI 53711

DRAWN BY:	JAY
CHECKED BY:	TAZ
DATE:	6/25/13
PROJECT #:	33-1152

SHEET TITLE
ELECTRICAL NOTES
SHEET NUMBER
E-4

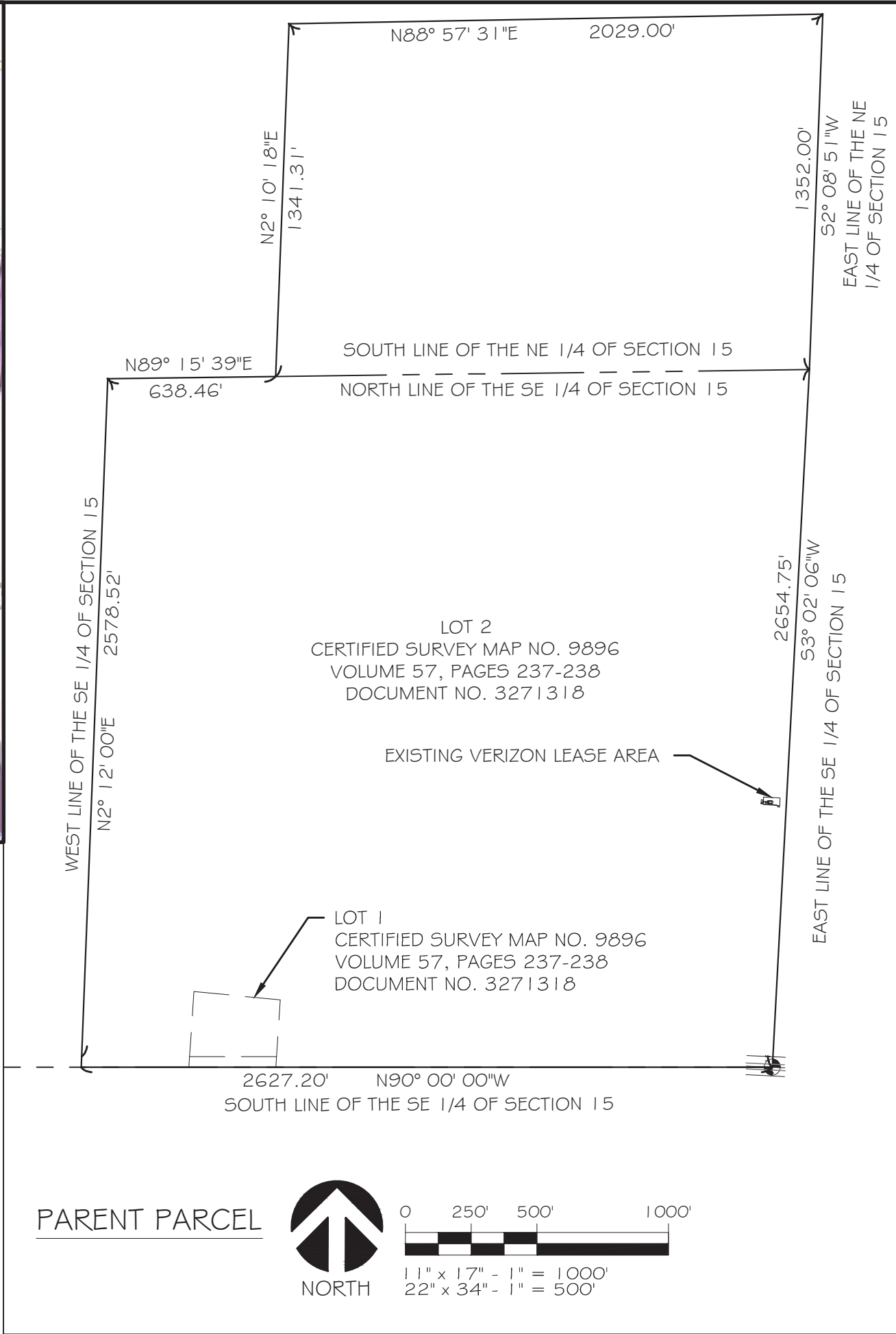


VICINITY MAP

N.T.S

SURVEYOR'S NOTES:

- 1) AN ATTEMPT WAS MADE TO LOCATE ALL PROPERTY CORNERS AND MONUMENTS. WHERE NO MONUMENTS WERE FOUND, THE PROPERTY LINE WAS DRAWN BASED ON RECORDED AND/OR FILED DOCUMENTS.
- 2)THE SURVEY FOR THIS MAP WAS PERFORMED BY RAMAKER & ASSOCIATES, INC. REVIEW WAS PERFORMED BY MARINUS B. BOTTERMAN.
- 3)NOT TO BE USED AS CONSTRUCTION DRAWINGS.
- 4)THE LOCATIONS OF UNDERGROUND UTILITIES WAS DETERMINED BY FIELD OBSERVATIONS AND VISIBLE MARKINGS ONLY AT TIME OF SURVEY.
- 5)PARENT PARCEL DESCRIPTION FROM RECORDED AND/OR FILED DOCUMENTS.
- 6)THIS MAP WAS PREPARED WITHOUT THE AID OF A TITLE COMMITMENT. REFER TO A CURRENT TITLE COMMITMENT FOR ANY BUILDING LINES AND EASEMENTS NOT SHOWN ON THIS MAP.
- 7)BEARINGS ARE REFERENCED TO THE EASE LINE OF LOT 2 OF CERTIFIED SURVEY MAP NO. 9896, RECORDED AS DOCUMENT NO. 3271318 IN VOLUME 57, PAGE 237 AND 238, IN THE DANE COUNTY REGISTER OF DEEDS OFFICE, SAID TO BEAR S03°02'06"W.



PARENT PARCEL DESCRIPTION

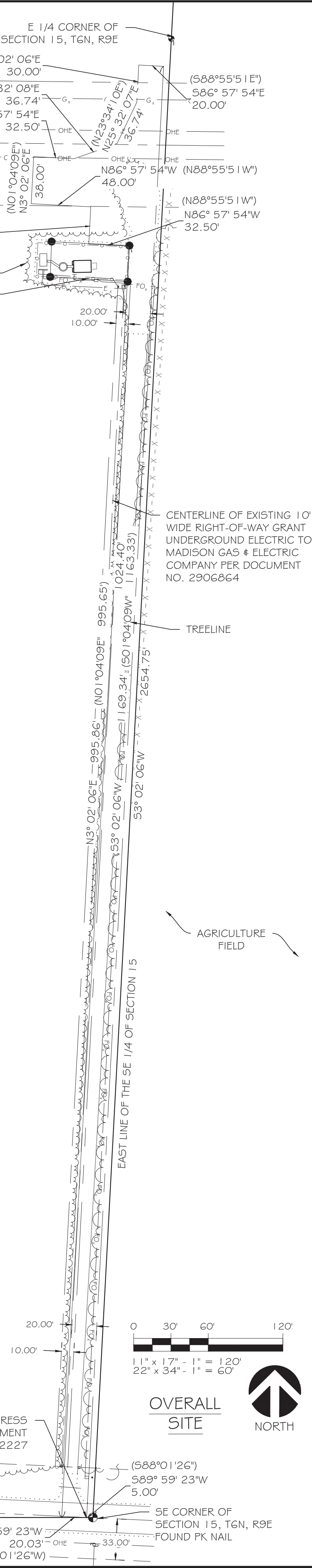
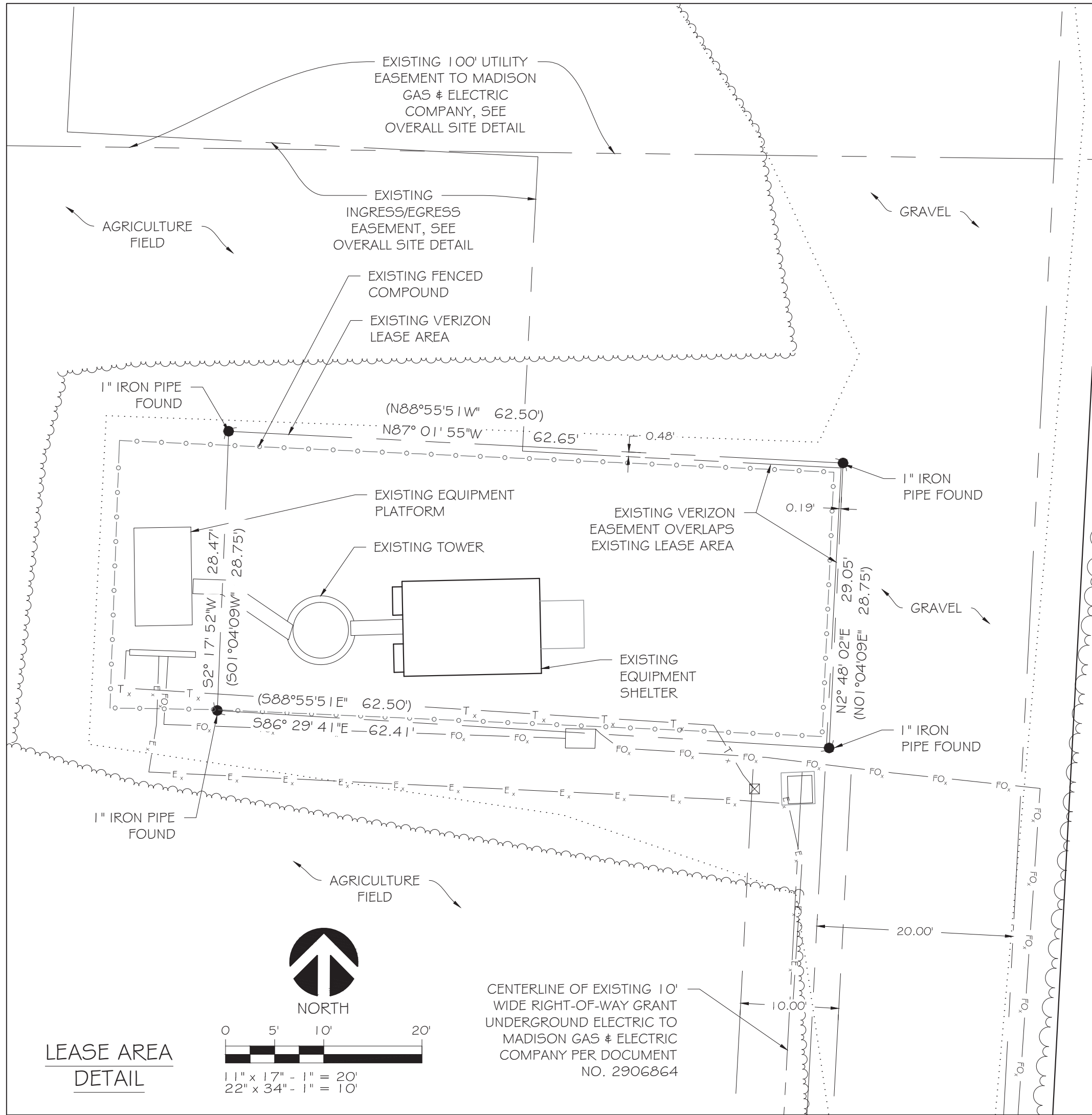
LOT 2 OF CERTIFIED SURVEY MAP NO.9896, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS FOR DANE COUNTY, WISCONSIN ON DECEMBER 6TH, 2000 IN VOLUME 57 OF CERTIFIED SURVEY MAPS, ON PAGE 237 AND 238, AS DOCUMENT NO.3271318 AND ALSO BEING A PART OF THE SOUTH 1/2 OF NORTHEAST 1/4 AND THE SOUTHEAST 1/4, ALL IN SECTION 15, TOWNSHIP 6 NORTH, RANGE 9 EAST, CITY OF FITCHBURG, DANE COUNTY, WISCONSIN.

EXISTING VERIZON LEASE AREA DESCRIPTION PER DOCUMENT NO. 4762227

A PART OF THE SOUTHEAST QUARTER (SE 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION FIFTEEN (15), TOWNSHIP SIX (6) NORTH, RANGE NINE (9) EAST, CITY OF FITCHBURG, DANE COUNTY, WISCONSIN CONTAINING 1.797 SQUARE FEET (0.041 ACRES) OF LAND AND BEING DESCRIBED BY: COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 15; THENCE S88°01'26"W 25.03 FEET ALONG THE SOUTH LINE OF THE SE 1/4 OF SAID SECTION 15; THENCE N01°04'09"E 995.65 FEET ON A LINE PARALLEL WITH AND 25.00 FEET WEST MEASURED AT RIGHT ANGLES FROM THE EAST LINE OF THE SE 1/4 OF SAID SECTION 15, TO THE POINT OF BEGINNING; THENCE CONTINUE N01°04'09"E 28.75 FEET; THENCE N88°55'51"W 62.50 FEET; THENCE S01°04'09"W 28.75 FEET; THENCE S88°55'51"E 62.50 FEET TO THE POINT OF BEGINNING; BEING SUBJECT TO ANY AND ALL EASEMENTS AND RESTRICTIONS OF RECORD.

EXISTING INGRESS/EGRESS EASEMENT DESCRIPTION PER DOCUMENT NO. 4762227

20 FOOT WIDE INGRESS/EGRESS EASEMENT A 20 FOOT WIDE INGRESS/EGRESS EASEMENT BEING A PART OF THE SOUTHEAST QUARTER (SE 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION FIFTEEN (15), TOWNSHIP SIX (6) NORTH, RANGE NINE (9) EAST, CITY OF FITCHBURG, DANE COUNTY, WISCONSIN CONTAINING 22,527 SQUARE FEET (0.517 ACRES) OF LAND AND BEING DESCRIBED BY: COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 15; THENCE S88°01'26"W 5.00 FEET ALONG THE SOUTH LINE OF THE SE 1/4 OF SAID SECTION 15 TO THE POINT OF BEGINNING; THENCE CONTINUE S88°01'26"W 20.03 FEET ALONG SAID SOUTH LINE; THENCE N01°04'09"E 1024.40 FEET ON A LINE PARALLEL WITH AND 25.00 FEET WEST MEASURED AT RIGHT ANGLES FROM THE EAST LINE OF THE SE 1/4 OF SAID SECTION 15; THENCE N88°55'51"W 62.50 FEET; THENCE N01°04'09"E 20.00 FEET; THENCE S88°55'51"E 62.50 FEET; THENCE N01°04'09"E 20.00 FEET; THENCE S88°55'51"E 20.00 FEET; THENCE S01°04'09"W 1063.33 FEET ON A LINE PARALLEL WITH AND 5.00 FEET WEST MEASURED AT RIGHT ANGLES FROM THE EAST LINE OF THE SE 1/4 OF SAID SECTION 15, TO THE POINT OF BEGINNING; BEING SUBJECT TO ANY AND ALL EASEMENTS AND RESTRICTIONS OF RECORD.



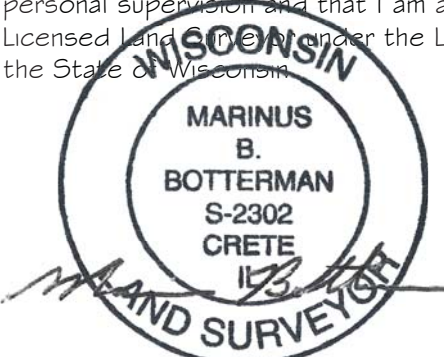
LEGEND

- | | |
|----------------------|-------------------------|
| — G _s — | EXISTING GAS |
| — T _s — | UNDERGROUND TELEPHONE |
| — E _s — | UNDERGROUND ELECTRIC |
| — OHE — | OVERHEAD ELECTRIC |
| — FO _s — | FIBER OPTIC CABLE |
| — STM _s — | STORM SEWER |
| — — — — — | BOUNDARY LINE |
| — — — — — | INTERIOR LINE |
| — — — — — | RIGHT-OF-WAY LINE |
| — — — — — | EASEMENT |
| — — — — — | CENTER LINE (C/L) |
| — — — — — | EDGE-ASPHALTIC PAVEMENT |
| — — — — — | EDGE-GRAVEL |
| — — — — — | TREELINE |
| — — — — — | EDGE OF FIELD |
| — — — — — | FENCE CHAIN LINK |
| ● | MONUMENT, FOUND |
| ⊗ | TELEPHONE PEDESTAL |
| ⊗ | ELECTRIC PANEL/TRANS. |
| ⊗ | UTILITY POLE |
| () | RECORDED AS |



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Certification # Seal:
I hereby certify that this Survey Document was prepared and the related Survey Work was performed by me or under my direct personal supervision and that I am a duly Licensed Land Surveyor under the Laws of the State of Wisconsin.



MARINUS B. BOTTERMAN, PLS
Date: 09/17/13 License Number: S-2302

MARK	DATE	DESCRIPTION
DATE ISSUED:	9/17/2013	
ISSUE PHASE:	FINAL	
PROJECT TITLE:		

IRISH LANE
113572

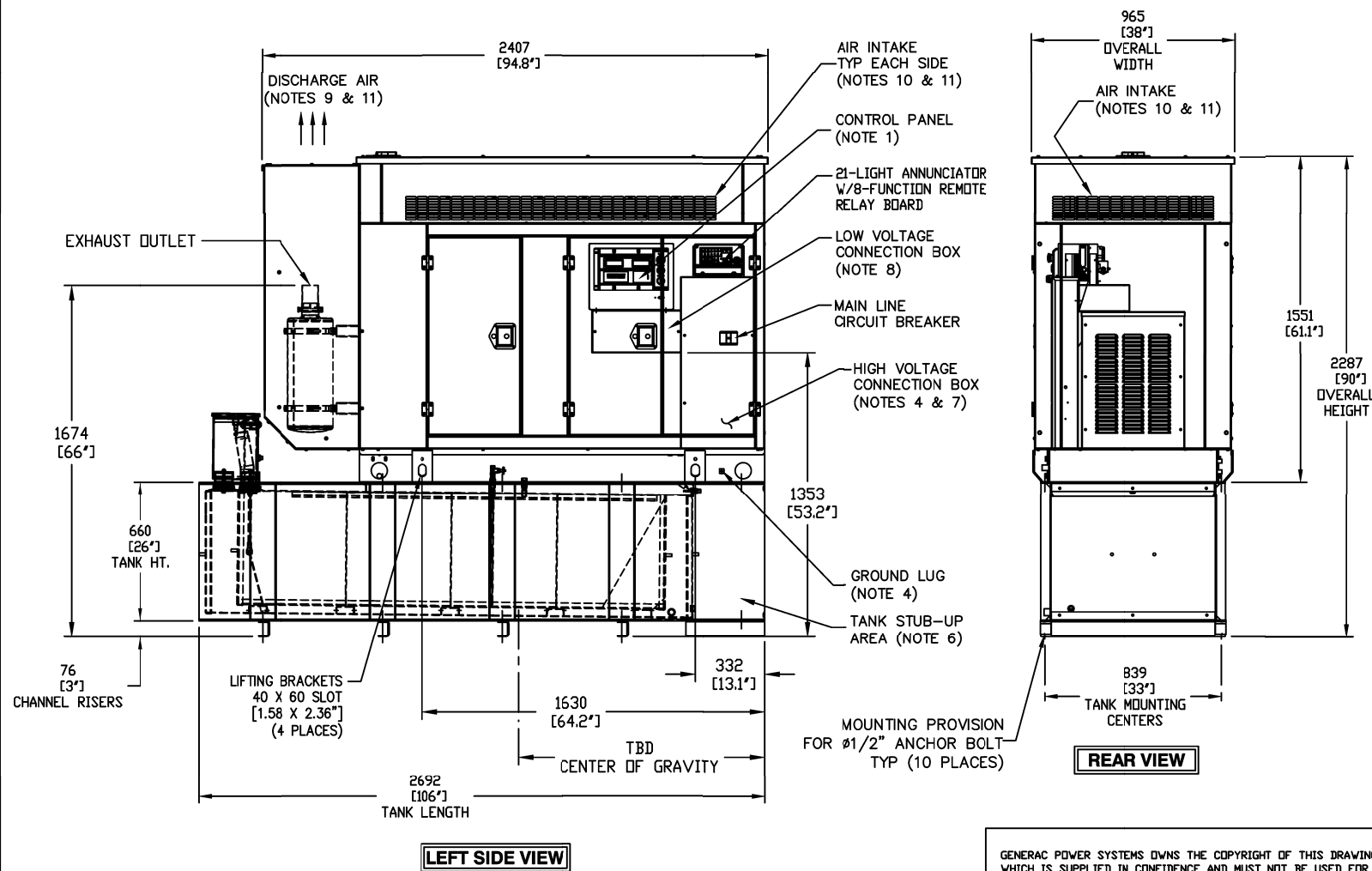
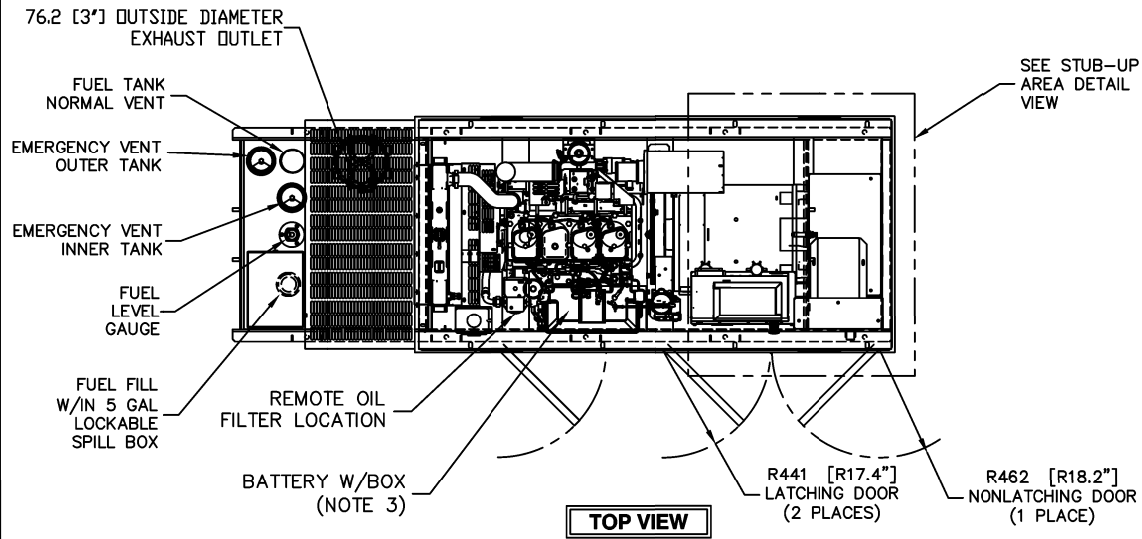
PROPERTY OWNER:
ROBERT & MARY FAHEY
5370 IRISH LANE
FITCHBURG, WI 53711
PROJECT LOCATION:
5370-5376 IRISH LANE
FITCHBURG, WI 53711

SHEET TITLE:

PLAT OF SURVEY

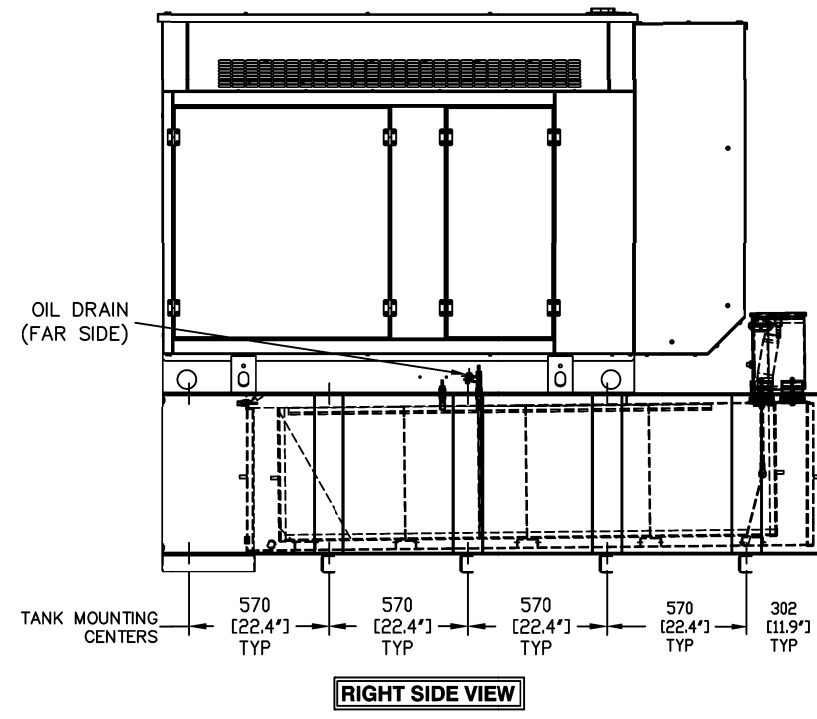
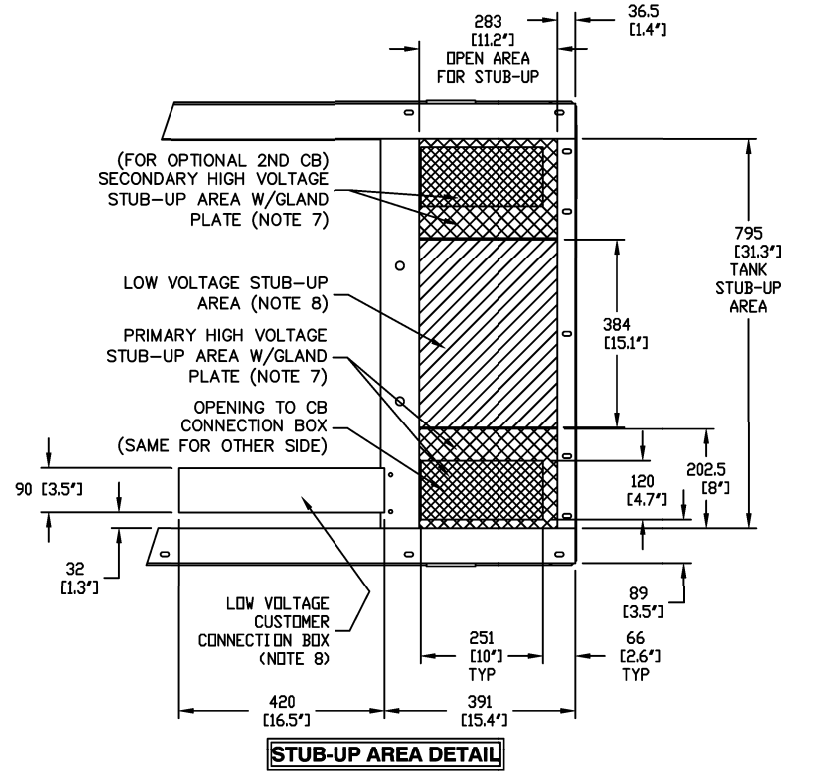
R & A NUMBER 20135-116
PROJECT NUMBER 26588
SHEET NUMBER 1 OF 1

0J8316G



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RECOMMENDED ELECTRICAL STUB-UPS (SEE DETAILED VIEW & TOP VIEW)	
DESCRIPTION	INSIDE BASE
HIGH VOLTAGE STUB-UP AREA 1) AC LOAD LEAD CONDUIT AREA. 2) 120/240 VAC FROM UTILITY FOR OPTIONAL LOADS SUCH AS GFCI OUTLET, BLOCK HEATER, BATTERY CHARGER, AND OTHER 120/240 VAC OPTIONS. (GLAND PLATE INCLUDED)	
LOW VOLTAGE STUB-UP AREA 1) TRANSFER SWITCH/ COMMUNICATION CONDUITS. COMMUNICATIONS AND 2-WIRE START MUST NOT BE RUN IN CONDUIT WITH AC WIRING. (SEE NOTE 9)	

- NOTES:**
- CONTROL PANEL W/BATTERY CHARGER. THREE PRONG CORD COMING OUT OF CONTROL PANEL IS FOR THE BATTERY CHARGER.
 - 1500W 120VAC ENGINE BLOCK HEATER W/CORD.
 - 12 VOLT NEGATIVE GROUND SYSTEM.
 - GENERATOR MUST BE GROUNDED.
 - CENTER OF GRAVITY & WEIGHT MAY SHIFT SLIGHTLY DUE TO UNIT OPTIONS.
 - STUB-UPS: BASE TANK REQUIRES ALL STUB-UPS TO BE IN THE REAR TANK STUB-UP AREA.
 - HIGH VOLTAGE STUB-UP AREA INCLUDES THE AC LOAD LEAD CONNECTION TO THE MAIN LINE CIRCUIT BREAKER (MLCB), THE NEUTRAL CONNECTION, AND AUXILIARY 120/240V CONNECTION.
 - CONNECTION POINTS FOR CONTROL WIRES. BOTTOM OF LOW VOLTAGE CUSTOMER CONNECTION BOX HAS KNOCKOUTS FOR 1/2" AND 3/4" CONDUIT FITTINGS.
 - MUST ALLOW FREE FLOW OF DISCHARGE AIR AND EXHAUST. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
 - MUST ALLOW FREE FLOW OF INTAKE AIR. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
 - ENCLOSED SETS - GENERATOR SET MUST BE INSTALLED SUCH THAT DISCHARGE AIR IS NOT RECIRCULATED.
 - IT IS THE RESPONSIBILITY OF THE INSTALLATION TECHNICIAN TO ENSURE THAT THE GENERATOR INSTALLATION COMPLIES WITH ALL APPLICABLE CODES, STANDARDS, AND REGULATIONS.
 - 190 GALLON USEABLE CAPACITY BASETANK STANDARD WITH GENERATOR.
 - UNIT IS SHIPPED WITH FUEL SUPPLY AND RETURN LINES DISCONNECTED AND PLUGGED BETWEEN ENGINE AND FUEL TANK. THIS HAS BEEN DONE TO FACILITATE PRESSURE TESTING OF THE TANK IN THE FIELD. FOR INFORMATION REGARDING CONNECTING THE FUEL SUPPLY AND RETURN LINES PRIOR TO START UP, SEE THE FUEL TANK FIELD TESTING PROCEDURE (0E5082) SUPPLIED IN THE TANK LOOSE VENTS KIT, WHICH IS SHIPPED WITH THIS GENERATOR.
 - SEE DRAWING 0C3850 FOR DUCT REMOVAL. REMOVAL OF FRONT DUCT WILL PROVIDE ACCESS TO MUFFLER FOR SERVICING.

WEIGHT DATA (INCLUDES WOODEN SHIPPING SKID)
ENCLOSED GENERATOR WITH EMPTY FUEL TANK - TBDkg (TBD lbs)

UNITS: mm [INCHES]

SALES SPECIAL

INSTALLATION DRAWING

INSTALLATION D4.5L G17 50KW
SINGLE SIDE SERVICE (LH SIDE)
ENCLOSED LEVEL 2A
WITH 190 GAL MI-DEQ BASE TANK
ISSUE DATE: 4/5/13

GENERAC POWER SYSTEMS Waukesha P.O. BOX 8 WAUKESHA, WIS. 53187	
FILE NAME	0J8316G.DWG
SCALE	NTS
DWG NO.	0J8316G
SIZE	B
FIRST USE	CD 1537839
REV	A